



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

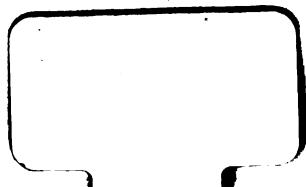
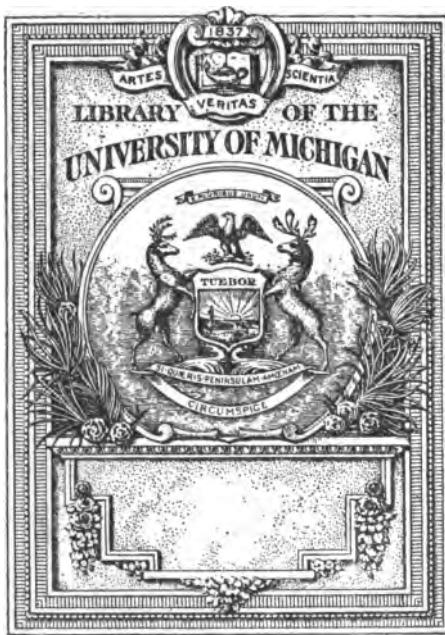
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

A 468424 DUPL

The Handbook Series

Latin and Greek

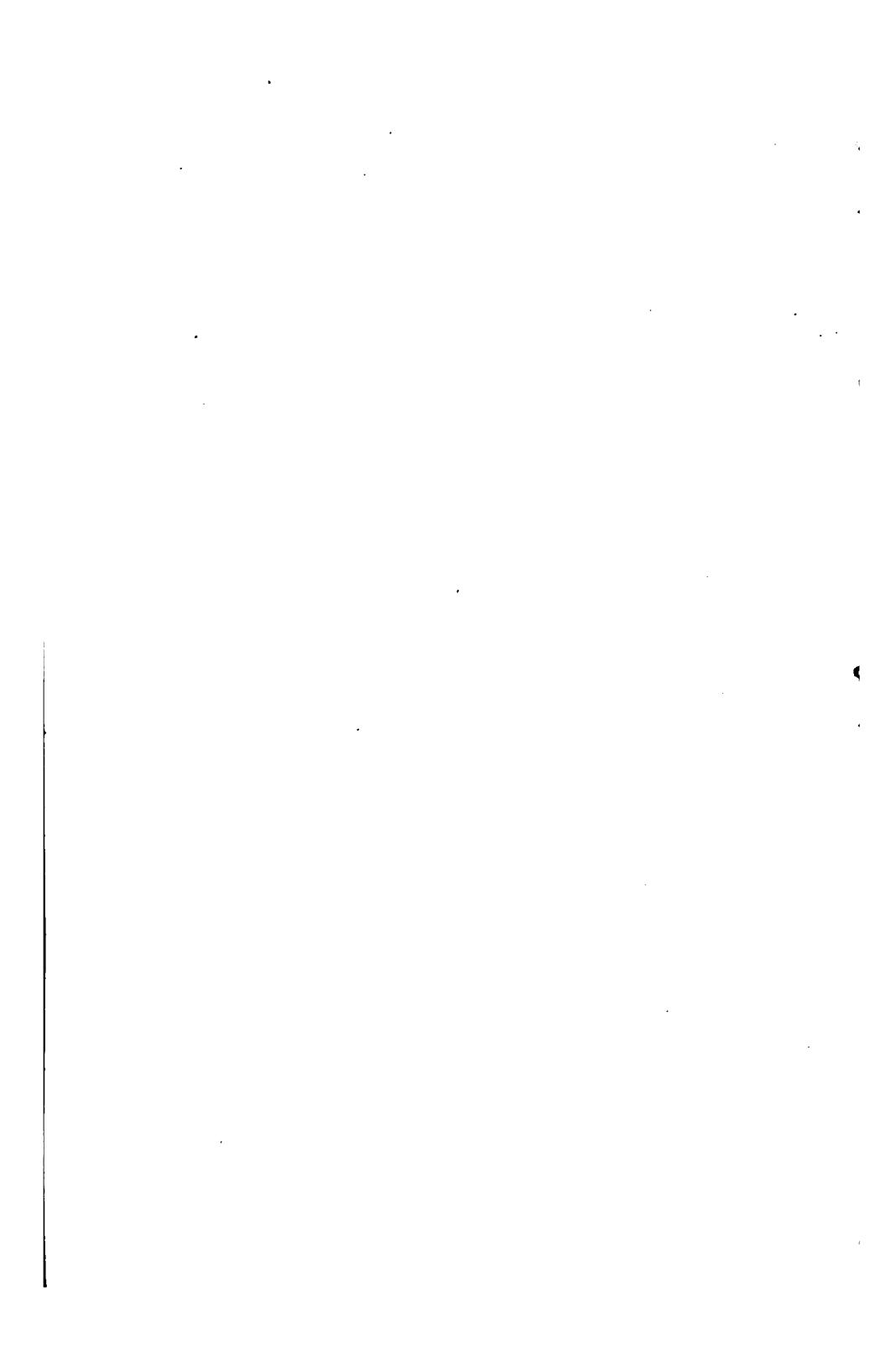
BEMAN



500
180

880.7

B 45s



THE HANDBOOK SERIES

**STUDY OF
LATIN AND GREEK**

THE HANDBOOK SERIES

AGRICULTURAL CREDIT	\$1.25
AMERICANIZATION, <i>2d ed.</i>	\$1.80
CLOSED SHOP	\$1.80
EUROPEAN WAR. VOL. II	\$1.25
IMMIGRATION	\$1.80
INDUSTRIAL RELATIONS	
EMPLOYM'T MANAGEM'T,	\$2.40
MODERN INDUSTRIAL MOVE- MENTS	\$2.40
PROBLEMS OF LABOR,	\$2.40
LEAGUE OF NATIONS, <i>4th ed.</i>	\$1.50
PRISON REFORM	\$1.25
SHORT BALLOT	\$1.25
SOCIALISM	\$1.25
VOCATIONAL EDUCATION	\$2.25

THE HANDBOOK SERIES

SELECTED ARTICLES
ON THE
STUDY OF LATIN AND GREEK

COMPILED BY
LAMAR T. BEMAN, A. M., LL. B.
Attorney at Law, Cleveland, Ohio

NEW YORK
THE H. W. WILSON COMPANY
LONDON: GRAFTON & CO.
1921

PUBLISHED, SEPTEMBER 1921
Printed in the United States of America

EXPLANATORY NOTE

The Classical Association of the Atlantic States published in 1915 a forty page pamphlet entitled "The Practical Value of Latin" in which were given the opinions of many prominent people advocating the study of Latin and Greek, with an introduction that endeavored to answer most of the more common objections to the study of the dead languages. Three copies of this pamphlet were sent to each member of the association together with a leaflet that asked for their co-operation "to get the pamphlet into the hands of those who need it most, the pupils and the parents who have to face the problem whether Latin shall be elected." Lower prices were charged for the pamphlet where a larger number of copies were taken for distribution. The leaflet further stated, "It is hoped that many members will purchase copies to be distributed as widely as possible. Members who are not in a position to distribute copies themselves may wish to contribute to a fund for the distribution of copies; such contributions will be most welcome." The pamphlet, on the inside of the first cover, states frankly that it is "published in the hope that children and parents both may be guided to a wise choice of studies in school and college by the aid of these convictions of persons of distinction."

No criticism is offered here of this organized propaganda, and this is only one small phase of the propaganda carried on by the teachers of the dead languages, but the opinion is expressed that it is seldom possible to reach a wise conclusion on any question that is a matter of public controversy by reading only one side of that case, and that this is particularly true when the *ex parte* statement is so largely a matter of opinions that have been compiled by interested parties. Children and parents may be, not "not guided to a choice," but rather given an opportunity to get for themselves the facts that will enable them to decide upon an even wiser choice of studies if they have at their disposal a little volume that presents fully and fairly "the convictions of persons of distinction" on both sides of this old and'

EXPLANATORY NOTE

long discussed question, a volume that endeavors to eliminate all bitterness and slurs, a volume in the preparation of which is no element of self interest or effort to lead the reader to the conclusion that the editor desires to create in his mind, a volume that endeavors to give so far as possible all the facts and the best of the "convictions" (that is, opinions) on both sides. Such is the general plan of the Handbook Series, in accordance with which this volume is compiled. Following the general plan of this series, the present volume endeavors to bring together the best that has been written on both sides of the old controversy over the value of the study of the Latin and Greek languages, to give bibliographical references to a wider field of the best literature of the question, and to include debaters' briefs in which the whole argument on each side is presented in skeleton form.

LAMAR T. BEMAN

February 1, 1921.

CONTENTS

BRIEFS

Affirmative Brief	ix
Negative Brief	xv

BIBLIOGRAPHY

Bibliographies and Briefs	xxix
General References	xxix
Affirmative References	xxxiii
Negative References	xliv

INTRODUCTION

GENERAL DISCUSSION

Classical Studies (Sonnenschein)	9
Mediæval Universities (Walsh)	13
Requirements for the Bachelor's Degree (John).....	17
Brief Excerpts	23

AFFIRMATIVE DISCUSSION

Case for the Classics (Shorey)	25
Worth of Ancient Literature (Bryce).....	52
Value of the Classics to Students of English (Denney)	70
Must the Classics Go? (West)	76
Measurements of the Effect of Latin (Perkins).....	88
Classics in British Education	92
Value of Latin and Greek (Cole)	107
Brief Excerpts	114

NEGATIVE DISCUSSION

Value of the Classics (Bain)	125
Liberal Education Without Latin (Snedden).....	149
Value of Studying Foreign Languages (Starch).....	168
Education as Mental Discipline (Flexner)	175
Teaching of English (Chamberlain)	193
Classical Literature Through Translations (Sisson)	202
Why I Have a Bad Education (Hall).....	205
Examples of Dead Language Propaganda	213
Brief Excerpts	216

One group of educators sturdily defends the traditional classical course, with its great emphasis on Greek and Latin, while another group as urgently insists that if any foreign languages are taught, they must be the modern ones. These opposing schools of thought are profoundly sincere in their conflicting beliefs. Each side is absolutely certain that it is right and is unalterably of the opinion that there is no other side of the question to be even so much as considered. Anything that agrees with its own side is based on reason; anything opposed is but ignorant prejudice. Under the circumstances the disinterested outsider may well suspect that where there is so much sincerity and conviction, there must be much truth on both sides. And undoubtedly this is the case.—*Franklin Bobbitt, "What the Schools Teach and Might Teach,"* p. 96. *Cleveland Education Survey, 1915.*

The presumption in favor of any belief generally entertained has existed in favor of many beliefs now known to be entirely erroneous, and is especially weak in the case of a theory which enlists the support of powerful special interests. The history of mankind everywhere shows the power that special interests, capable of organization and action, may exert in securing the acceptance of the most monstrous doctrines. We have, indeed, only to look around us to see how easily a small special interest may exert greater influence in forming opinion and in making laws than a large general interest.—*Henry George, Protection or Free Trade.* p. 12.

BRIEFS

RESOLVED, That a wise choice of studies in high school or college would include Latin (and Greek.)

AFFIRMATIVE BRIEF

Introduction.

- A. Historical statement.
 - 1. The modern study of the ancient classical languages dates from the fall of Constantinople in 1453.
 - 2. It was introduced into England in the following century.
 - 3. It was brought to this country from England with our other institutions and customs.
 - 4. From the founding of Harvard College until quite recently the study of the ancient classical languages was recognized as the pillar of the curriculum in every institution of higher education.
 - 5. The ancient classical languages have gained ground during the past few years.
- B. The purpose of higher education is to disseminate true culture.
 - 1. Culture is knowing the best that has been thought and said in the whole history of mankind.
 - 2. A cultured person is one who finds in his mind and tastes a permanent source of satisfaction and enjoyment.
 - 3. Culture is obtained from a liberal education, one that develops all the faculties and qualities of the mind.
- C. The affirmative will prove that the study of the ancient classical languages:
 - 1. Gives a superior mental training.
 - 2. Is the foundation of all true culture.

x

BRIEF

3. Is exceedingly valuable for the knowledge it gives.
4. Is the best foundation and preparation for other studies.
5. Is approved and endorsed by most of the great educators and the men and women who have been leaders of thought and action.

I. The study of the ancient classical languages gives a superior mental training.

- A. The classics have stood the test of time as a formative study.
 1. They have been so recognized for more than three hundred years in all civilized countries.
 2. They are today the pillars of almost every high school course in America.
 - (a) More than half a million students in our public high schools are now taking Latin.
 - (b) This number is constantly increasing.
 - (c) The pupils who take Latin are the more substantial and serious minded students.
- B. The classic languages supplement science, mathematics, and history to make a well rounded course.
- C. The study of the ancient classical languages develops all the powers and faculties of the human mind.
 1. It gives the best known memory training.
 2. It develops accuracy and precision in the use of language.
 3. It trains and perfects the judgment.
 4. It enlarges the vision.
 5. It develops the reasoning powers.
 6. It quickens the powers of observation and perception.
 7. It gives concentration of mind.
 8. It develops breadth of sympathy.
 9. It enlarges the understanding.
 10. It develops habits of thoroughness and industry.
- D. The unquestionable results of classical training are, absolute proof of its superior value as a form of mental training.

- I. Students with a classical education invariably do the best work in the professional and scientific schools. (West, *Value of the Classics*. p. 364-86)
2. Most of the great men of the world within the last three hundred years have had a classical education.
3. Students who enter college without any classical preparation are not nearly as well equipped for college work and do not accomplish as much in college as those who have taken Latin and Greek in the preparatory schools. (*University of Colorado Bulletin*. Sept. 1914, and *North American Review* 138: 161. Feb. 1884.)

II. The study of the ancient classical languages is the foundation of all true culture.

- A. It is universally so recognized.
 1. So recognized for three hundred years.
 2. So recognized in all civilized countries.
 3. So recognized by most of the great educational leaders.
 - (a) Nicholas Murray Butler (*Meaning of Education*. p. 173.)
- B. It gives polish, grace and refinement.
 - I. It gives one the power to understand and enjoy the best of our own literature.
 - (a) English literature, especially poetry, abounds with references to ancient mythology and literature.
- C. It gives the power to appreciate the beautiful in art and architecture.
 - I. By developing the power of observation and perception.
 2. By developing the imagination.
- D. It gives poise and mental equilibrium.
 - I. Men and nations whose leaders have a classical education do not yield to hysteria in times of crisis or excitement.
- E. It gives one a sense of pleasure and satisfaction in his own mind.

III. The study of the ancient classical languages is very valuable for the knowledge it gives.

A. It reveals ancient civilization at first hand; it is history by source material.

1. The laws, customs, and institutions of the foundation civilizations are revealed.

B. It gives the student first hand information concerning the best of the world's literature.

1. No poet has ever equalled Homer, and no one really understands and appreciates Homer who has not read him in the original.

C. It brings the student into direct contact with the nations that produced the best of the world's art and architecture.

IV. The study of the ancient classical languages is the best foundation and preparation for other studies.

A. It contributes to success in the professions and sciences.

1. It is a great help in the legal profession.

(a) The phrases and maxims of the law are largely in Latin.

(b) A knowledge of Latin makes a splendid introduction to the study of the civil law, which has come down to us from ancient Rome.

2. It is very valuable for the medical profession.

(a) Latin or Greek words make up the terminology of anatomy, pharmacy, botany and some other sciences.

3. It is necessary as a preparation for the priesthood or the ministry.

(a) The exact meaning of many passages of the scriptures can be ascertained only by one who has learned Latin and Greek.

4. It is very helpful to most of the sciences.

(a) Latin or Greek words make up the terminology of most of the sciences.

5. Most of the men who have achieved eminence in the professions and sciences in recent centuries have had a classical education.
- B. A knowledge of the ancient classical languages greatly facilitates the acquisition of the Romance languages.
 1. In any class in the Romance languages in any college, the best work is done by those students who have mastered the classics.
 2. French, Spanish, and Italian are very largely derived from the Latin. (Sabin, *The Relation of Latin to Practical Life*. p 35)
 3. Students and teachers of Romance languages are unanimous in their statements of the benefits of a classical preparation for the Romance languages.
- C. A knowledge of the ancient classical languages is essential to a thorough mastery of English.
 1. This is the testimony of professors and teachers of English.
 2. About half of the words in the English language are derived from Latin or Greek.
 3. Careful translation gives a peculiar command of English.
 - (a) It enriches the vocabulary.
 - (b) It teaches the exact meaning of words.
 - (c) It enables the student to grasp the meaning of many words without reference to the dictionary.
 - (d) It greatly facilitates the use of the prefixes and suffixes.
 4. Latin or Greek Grammar gives new meaning to English Grammar.
 - (a) It gives accurate knowledge and understanding of the English sentence.
- V. The study of the ancient classical languages has been approved and endorsed as the best possible education by most of the great educators and by many of the great leaders in all fields of thought and action. West, *Value of the Classics*).

A. Educators.

1. President Lowell of Harvard.
2. President Hadley of Yale.
3. President Hibben of Princeton.
4. William T. Harris, former U. S. Commissioner of Education.
5. President Butler of Columbia.
6. Chancellor Day of Syracuse.

B. Statesmen.

1. James Bryce.
2. Theodore Roosevelt.
3. Woodrow Wilson.
4. William E. Gladstone.

C. Lawyers and Jurists.

1. William H. Taft.
2. Elihu Root.
3. Roscoe Pound.
4. A. Mitchell Palmer.

D. Clergymen.

1. Hugh Black.
2. Benjamin D. Warfield.
3. John DeWitt.
4. William D. McKenzie.

E. Writers and Authors.

1. James Russell Lowell.
2. John Stuart Mill.
3. Lyman Abbott.
4. Henry Van Dyke.

F. Physicians.

1. Victor C. Vaughan.
2. Mayo Brothers.
3. William S. Thayer.
4. Charles S. Dana.

G. Business men.

1. James Loeb.
2. William Sloan.
3. Alba B. Johnson.
4. S. S. McClure.
5. George H. Putnam.

H. Engineers.

1. Charles P. Steinmetz.
2. John N. Vedder.

NEGATIVE BRIEF**Introduction.**

- A. Almost all conditions of life have changed fundamentally in the three hundred years since the study of the dead languages was introduced in England.
 1. Then there was relatively little else to study.
 - (a) Such knowledge as did exist was largely locked up in the dead languages.
 2. Then the study of the dead languages was warmly supported and encouraged by despotism and intolerance.
 3. Now there are many useful studies.
 - (a) The English language.
 - (x) A good command and an elegant usage of English are now a necessity to all educated people.
 - (y) The literature of the English language is now the best in the world.
 - (b) There is now a vast body of important scientific knowledge.
 - (w) Physical science, physics, chemistry, geology, astronomy, geography, etc.
 - (x) Biological sciences, botany, zoology, bacteriology, physiology, hygiene, etc.
 - (y) Social sciences, economics, political science, sociology, etc.
 - (z) Applied science, industrial arts, agriculture, commerce and engineering in its various branches.
 - (c) History
 - (d) Philosophy.
 - (e) Mathematics.
 - B. The meaning of the question.
 1. For practical purposes this question refers only to the study of Latin, for Greek has practically dis-

appeared from our high schools and colleges, so that most of the students could not take Greek even if they wanted to do so.

- C. The true purpose of education. Lapp and Mote, Learning to Earn. Chap. I.
 - 1. To prepare each individual for a life of service.
 - 2. To develop the natural capabilities of each and every person, so that he may fill a useful place in society.
- D. The Negative will prove
 - 1. That the study of the dead languages is very harmful as a form of mental training.
 - 2. That the knowledge acquired from the study of the dead languages is absolutely useless to the average person.
 - 3. That the study of the dead languages is not necessary for nor materially helpful to other studies.
 - 4. That the study of the dead languages entails an enormous social waste.
 - 5. That the study of the dead languages is strongly opposed by the majority of the able and disinterested people.
- I. The study of the dead languages is very harmful as a form of mental training.
 - A. It gives a narrow one-sided training.
 - 1. It is chiefly memory training.
 - (a) It expends rather than trains the memory. (Bain, Education as a science p. 367)
 - 2. It encourages acquiescence. (Spencer, Education; Intellectual, Moral, and Physical. p. 79)
 - 3. It develops narrowness and snobbishness. (Classical Journal 13: 147)
 - 4. It does not develop initiative.
 - B. It does not develop the intellectual powers.
 - 1. The power of logical reasoning.
 - 2. The power of original thinking.
 - 3. The power of independent inquiry or bold investigation.

4. The observing and reflective powers. (Adams, A College Fetich)

C. It turns attention away from the realities of the world.

1. Language is merely a tool of value as we make use of it.
2. The intensive study of the dead languages uses the best years of the student's life on grammar, syntax, inflections, vocabulary, and translation of a few fragments of ancient literature.
3. It is chiefly the few language-minded students who take more than a mere smattering of the dead languages, and these are the ones above all others who do not need this form of training.
4. Language study does not develop the habits and the qualities of mind necessary for men of thought and action in the affairs of life in the twentieth century.

D. The universal use of illegitimate helps makes absolutely impossible the good results that are claimed to follow from the slow and tedious grind of studying the dead languages, but instead makes the study conducive to dishonest methods in other things as well as making the so called culture very superficial.

1. Handy literal translations.
2. Interlinear translations.

E. Claims often made and never proved that students who have taken the dead languages do better work in other studies, even if proved, would not prove any superiority for the training obtained from the study of the dead languages.

1. As a general rule it is the abler students who take and continue work in the dead languages.
 - (a) Other students are not wanted. Classical Journal 13: 147 Dec. 1917.
 - (b) Many weaker students change their course or leave school discouraged.
2. In the professional and scientific schools comparisons are usually meaningless.

- (a) Students who have taken the dead languages in high school and college are compared with those who have never been to college.
- F. The men of this generation who have taken Latin and Greek through high school and college have accomplished less in life than men with a practical modern education.
- II. The knowledge acquired from a study of the dead languages is absolutely useless to the average person.
 - A. Direct use of this knowledge is seldom if ever made.
 - 1. The knowledge acquired consists of:
 - (a) Details of inflection, grammar, vocabulary, etc. of a dead language.
 - (b) More or less ability to translate slowly and tediously.
 - (c) A smattering of the facts of ancient history.
 - (d) Some acquaintance with primitive pagan civilization, with its highly immoral mythology and childish superstition, its human slavery of white men, its gladiatorial fights, its very corrupt government and society, its brutal dungeons, its horrible warfare with spear and sword, its frequent murders, its wholesale robbery of its colonies, its utter intolerance and contempt of the rights of other nations.
 - 2. Not one student in a hundred makes any use at all of any of these facts.
 - 3. All students soon forget practically all of this information.
 - 4. It is outrageously absurd for high school and college students to go through the dull and dismal grind of learning all this useless nonsense.
 - B. Most of the high school students taking the dead languages do not pursue them long enough to get their supposed benefits.
 - I. The head of the Latin department at Adelbert College said in 1915 "It is of course foolish for anyone to take Latin without Greek," but over half

a million students in American high schools are doing so.

2. About one third of the students in high schools take Latin, but most of them do not take more than two years of it. (Lankester, Natural Science and the Classical System in Education. p. 201)

- (a) Many never complete one year of it.
- (b) Many take only two years to make the requirement of the colleges.
- (c) Some high schools are only three year schools.

C. All beautiful or useful thought in the dead languages has been well translated.

- 1. To know the facts of ancient history it is not necessary to learn the dead languages.
- 2. Persons who study Plato, Aristotle, or Cicero for the knowledge to be obtained from their works, invariably do so by reading a translation.
- 3. It had never been considered necessary to know Latin or Greek to read understandingly the Holy Scriptures.

III. The study of the dead languages is not necessary for nor materially helpful to other studies.

A. It is neither necessary nor helpful to the learned professions.

- 1. Many of our ablest lawyers, jurists, physicians, surgeons, clergymen, engineers, authors, editors, business men, etc. never studied any dead language.
 - (a) Abraham Lincoln.
 - (b) William Shakespeare.
 - (c) W. D. Howells.
 - (d) T. B. Aldrich.
- 2. The fact that the terminology of some of the sciences and some of the words and phrases used in the law are Latin or Greek words does not prove that it is necessary or even helpful for one to go through the long, dull, dismal, and stupifying grind of learning the dead languages in order to make a success of one of these sciences or professions.

BRIEF

- (a) Such Latin phrases as "*habeas corpus*" "*ex post Facto*" "*in quo warrantio*" are no more difficult to understand than such terms as "right of eminent domain," "Garnishee" or "legal tender."
- (b) Practically all knowledge of the dead languages is so soon forgotten as to make any professional man who has studied the dead languages just as much dependent upon his dictionary as his associate who never wasted any time on them.
- (c) To most scientific and technical terms a knowledge of the Latin or Greek root would give little meaning and would often cause confusion. (Bain, Education as a Science. p. 375-6)

3. Useful and practical studies would be a far better preparation for the professions and sciences.

B. The study of the dead languages is not necessary nor helpful to an elegant and forceful use of English. (Bain, Education as a Science. p. 374-8)

- 1. Many persons who have used English most elegantly, forcefully and most accurately never studied a dead language.
 - (a) Abraham Lincoln.
 - (b) William Shakespeare.
 - (c) Henry George.
 - (d) W. D. Howells.
- 2. The claim that without studying the dead languages or at least Latin it is impossible for the average person to gain a complete mastery of English is ridiculously absurd.
 - (a) This claim for the dead languages was not made until quite recently.
 - (b) While this statement has often been made, it has never been proved. The Negative asks for proof, for some real evidence.
 - (c) Opinions do not make proof, especially is this true of the biased opinions of financially interested parties.

- (d) Latin and Greek are too unlike English.
- (e) It would be just as reasonable to say that it is necessary to study astronomy in order to prepare for dentistry.
- (f) When the classical group ruled our schools and colleges, it was necessary to take both languages throughout the high school and college course, and the result was that practically no English was taught in the high schools until about twenty-five years ago.
- (g) The fact that many English words are derived from Greek or Latin roots, does not prove that it is necessary or even helpful to a complete mastery of English for one to spend years at the dull drudgery of learning the dead languages.
- (v) It might just as well be said that one must learn the original Anglo-Saxon from which many English words are also derived.
- (w) Many English words now have a very different meaning than the Latin or Greek roots from which they were originally derived.
- (x) There are no words in the English language of which any high school boy or girl cannot easily and quickly obtain the exact meaning.
- (y) Any person who has studied the dead languages so soon forgets them that they are of very little help in understanding or using English.
- (z) Latin vocabulary of most students is too small to be of real help.

3. The only way to learn English so as to have a good command of it, is by studying English.

- (a) Nobody uses English elegantly and well unless he has read some of the best works in English literature and has associated to some extent with educated and cultured people.

- (b) Nobody writes elegant and forceful English unless he has had practice in doing so.
- (c) The student who has taken Latin and Greek gives just as much time in high school and college to the study of English as the student who has never studied a dead language.
- (x) If the study of the dead languages were any real help to English, certainly the high school courses would be so arranged as to require less English work of the classical students than of others.

4. The study of Latin at the high school age is very injurious to English. (Mackie, Education during Adolescence. p. 99 et seq.)

- C. The study of the dead languages is not really helpful, much less necessary, to a study of the modern languages.
 1. Half of the time spent on the dead language would be sufficient to learn a modern language.
 2. Most of the students who learn the dead languages thoroughly do not have time to take up the modern languages.
- D. The study of the dead languages does not excite the intellectual interests of modern students.
 1. It does not lead to interest in other allied studies, or to the acquisition of other knowledge.
 2. The dead languages are not interesting or inspiring in themselves, nor do they excite a student to continue his study.
 - (a) The study of the dead languages is never continued after a student leaves high school or college.
 - (x) Occasionally we hear it said that some person enjoyed reviewing them in his dotage, but who can tell of a particular case where this was true.
 - (y) For every case of a person who enjoyed reading Homer in his dotage, a thousand boys have left high school in

disgust over the dry bones of the dead languages.

- (z) Both John Adams and Thomas Jefferson, after they were seventy years of age, spent some time on the Greek classics and exchanged letters of dissatisfaction and disgust. (Adams, *A College Fetich*)
- (b) Teachers or teaching methods are often blamed for making the dead languages dull and uninteresting.
 - (x) This is most absurd, because the teachers of the dead languages as a rule are superior teachers,
 - (y) Only superhuman power can restore life to the dead.
 - (z) Teaching methods were criticised by Milton, Heine, and have been criticised continually ever since.

IV. The study of the dead languages entails an enormous social waste.

- A. It prevents the student from taking important and useful subjects and getting knowledge which every person ought to have.
 - 1. It is possible to cover only sixteen units in a high school course of four years.
 - 2. Every high school student taking a cultural course ought to get at least:
 - (a) Four units of English.
 - (b) Two units of physical science.
 - (c) Two units of biological science.
 - (d) Two units of social science.
 - (e) Three units of history.
 - (f) Three units of mathematics.
 - (g) Some modern language might be included for those who will make use of it.
 - (h) Some practical science.
 - 3. About half of this must be omitted by the student who takes the Latin-Greek course, and one quarter of it by the student who takes Latin without Greek.

4. If any foreign languages are taken, they should be the modern languages, for these have the possibility of being of some use to the student.
5. Students taking dead language in high school are compelled to give it most of their time and effort in their study hours, neglecting the practical and useful studies.

B. The study of the dead languages retards and prevents the education of many pupils.

1. It is a dull and dismal grind that takes a student away from the realities of the world and compels him to labor tediously at memorizing, conjugating, cramming rules of grammar, syntax, meanings of words, idioms, and slowly translating bits of ancient writings.
 - (a) Many boys leave high school in disgust, robbed of their education. (G. Stanley Hall, School Review 9: 656 Dec. 1901)
 - (b) Many pupils do not make progress and change their course.
 - (c) None of the pupils can consider the study as connected with the realities of the world.

C. The study of the dead languages has retarded the progress of civilization.

1. The progress of civilization has been enhanced by the great inventions, discoveries, and reforms made in the fields of science, including the physical sciences, that is, chemistry, physics, engineering, transportation, communication, mining, agriculture, etc., and also including social science, that is, government, industrial relations, social service, etc.
2. The study of the dead languages diverts the attention of many of the best minds away from these things to the details of ancient history, grammar, and philology.
 - (a) The grind over the dead languages unfits a person for a life of useful service in the world.
 - (b) The careful student of the dead languages cannot be the best type of a good citizen in a twentieth century democracy.

- (c) He is either a bookworm, or he has lost the best of his student hours in the pedagogical treadmill of the dead languages.
- 3. By turning attention away from the realities of the world, the study of the dead languages has retarded the progress of civilization by more than a century.
- D. The study of the dead languages creates snobbishness in education.
 - 1. It was originally designed in England to create gentlemen of leisure, who considered themselves above ordinary people and who showed their loftiness of mind by the occasional use of a Latin quotation.
 - 2. In our high schools today the "classical" teachers and "classical" students assume an attitude of lofty superiority and look with contempt upon all who waste none of their time on the dead languages. (Classical Journal 13: 147 Dec. 1917.)
 - 3. The better forms of education have been attacked and ridiculed for a hundred years by persons whose motive was to preserve their own positions teaching the dead languages.
 - (a) Practical and useful studies have been denounced as "low utilitarianism" and "a mess of potage."
 - (b) An organized propaganda has been carried on for several years by teachers of the dead languages.
 - (w) The pamphlet "The Practical Value of Latin" By the Classical Association of the Atlantic States published in 1915 is an example.
 - (x) The files of the Classical Journal and the Classical weekly contain articles telling the benefits of the study of the dead languages and giving teachers of these subjects ideas as how to carry on the work of proselytism (Classical Journal 10: 267), (Classical Weekly 5: 1, Oct. 7, '11 and 6: 210-12 May 17, '13.)

(y) Most of the books and magazine articles defending the study of the dead languages have been written by teachers of these subjects.

(z) Personal and individual work has been carried on by teachers in an effort to persuade or to influence individual students to take the dead languages.

(Lankester, Natural Science and the Classical System in Education. p. 202)

V. Although opinion evidence cannot be given great weight in any debate, the preponderance of the able and disinterested opinion is strongly opposed to the study of the dead languages.

A. Opinion evidence is one of the weakest forms of evidence.

1. Opinion evidence is admitted in a court of law only after the witness has been qualified as an expert.

2. The "best evidence" rule of the law rules out of court poorer evidence when the best evidence is obtainable.

(a) Opinion evidence on the value of the study of the dead languages can only be construed as meaning a total absence of any real proof.

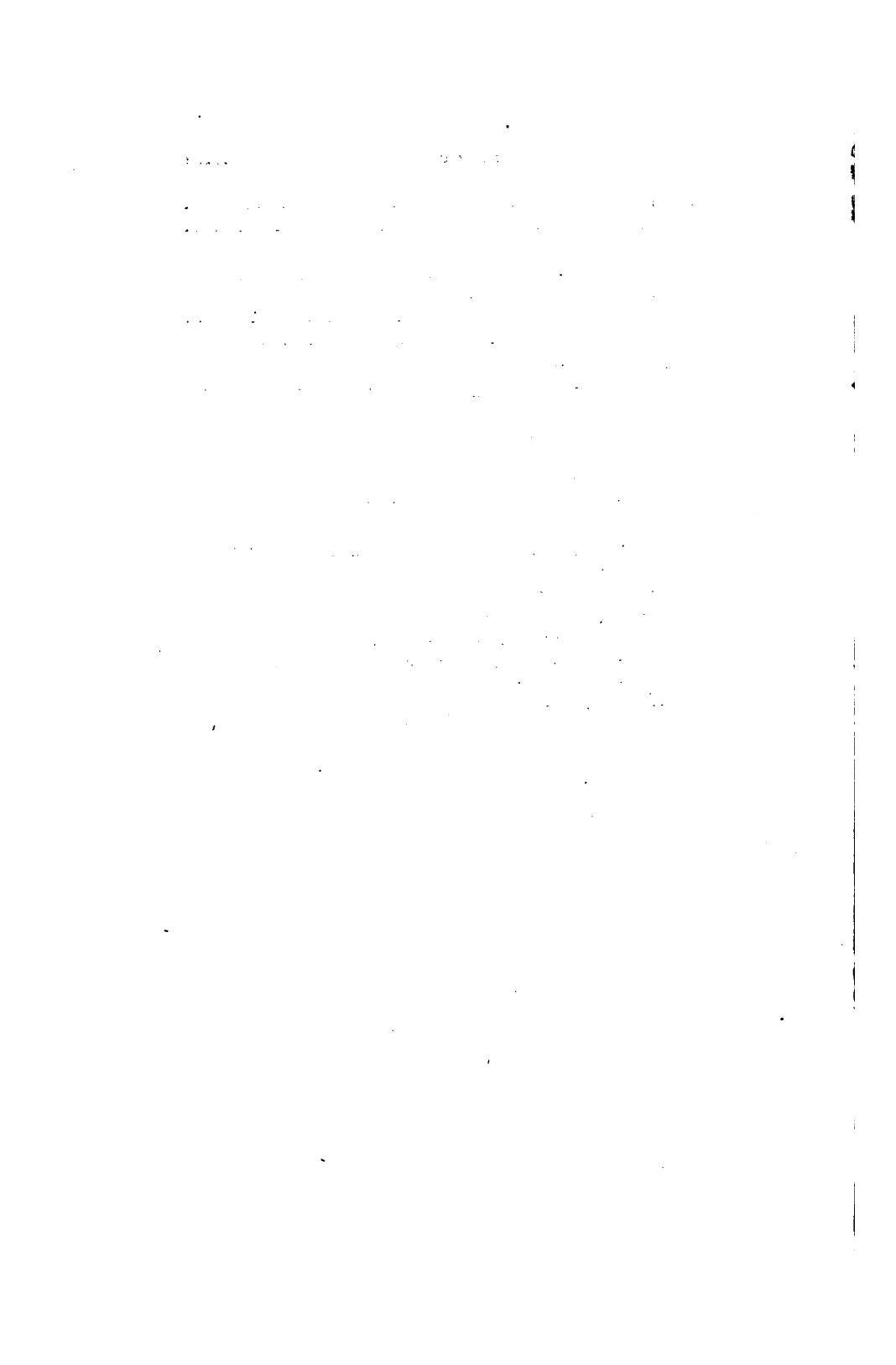
(b) Opinion evidence on this question can have little weight because the dead languages have been studied for over three hundred years and if the results are as good as claimed, then it would be easy to present better evidence than opinions in their defense.

3. All opinions of teachers of the dead languages as to the value of their study must be considered as the biased testimony of persons financially interested in the subject of the controversy.

4. Many of the opinions given in the propaganda of the Classical associations endorse a "thorough" or a "complete" course in Latin and Greek, and not a smattering of Latin, which is all that the average high school student gets.

B. The opinions of many able and financially disinterested persons can be cited against the study of the dead languages.

1. Herbert Spencer, the great English philosopher.
2. Prof. Alexander Bain.
3. Charles W. Eliot, former President of Harvard University, and one of the greatest of all American educators.
4. David Starr Jordan, Leland Stanford Junior University.
5. Thomas H. Huxley.
6. Lord Rosebury.
7. Abraham Flexner.
8. G. Stanley Hall, President of Clark University.
9. H. G. Wells, the eminent English writer.
10. Sir E. Ray Lankester, the eminent English scientist.
11. Alexander Winchell.
12. Benjamin Franklin.
13. Prof. Edward A. Ross.
14. President Holmes of Drake University.
15. Ralph Waldo Emerson.
16. Charles Francis Adams.



BIBLIOGRAPHY

An asterisk (*) preceding a title means that the article is reprinted at least in part in this volume. A dagger (†) is used to indicate a few of the other best references.

BIBLIOGRAPHIES

American Classical League, Publications of. Leaflet 4 p. Dean Andrew F. West, President, Princeton, N. J.

Askew, John B. Pros and cons. G. Routledge & Sons. 1908.
p. 104. Greek compulsory in the universities. Syllabi and references.

Bennett, Charles E. and Bristol, George P. The teaching of Latin and Greek in the secondary school. Longmans, Green & Co. 1901.

Carnegie Library of Pittsburgh. Classified bibliography. Type-written. 1920.

Clark University Library, Publications of. 4: 33-4. D '14. Latin in the high school and methods of teaching it. Joseph V. O'Connell.

Game, Josiah B. Teaching high school Latin. University of Chicago Press. 1916.
p. 7. Summary of Results. Syllabus.

Matson, Henry. References for literary workers. A. C. McClurg & Co. 1907.
p. 252-8. The classics and a liberal education. Syllabi and references.

Rowton, Frederic. How to conduct a debate. Fitzgerald Pub. Co.
p. 190. Which are of the greater importance in education, the classics or mathematics. Syllabi and references.
p. 216. Is a classical education essential to an American gentleman? references.

GENERAL REFERENCES

Books and Pamphlets

Butler, Nicholas M. The meaning of education. Macmillan & Co. 1898.
p. 172-7. Greek and Latin.

Catholic Encyclopedia. Robert Appleton & Co. 1910.
p. 324. Latin literature in the church. Paul Lejay.

Eliot, Charles W. Educational reforms. Century Co. 1898.

Fletcher, Alfred E. Sonnenschein's Cyclopedias of education. Swan, Sonnenschein & Co. 1906.
p. 59-61. Classical studies.

John, Walton C. Requirements for the bachelor's degree. U.S. Bureau of Education. 1920.

Kiddle, Henry and Schem, Alexander J. Cyclopedias of education. Sampson Low & Co. 1877.
p. 139-42. Classical studies.

†Parker, Charles S. On the history of classical education in essays on a liberal education. Macmillan 1867.
Reprinted as Chap. II. p. 14-90 in Sir Ray Lankester's Natural Science and the Classical System in Education. William Heinemann. 1918.

Ruediger, William C. The principles of education. Houghton, Mifflin Co. 1910.

Sandys, John E. A history of classical scholarship. G. P. Putnam's Sons. 1909.

*Walsh, James J. Education, How old the new. Fordham University Press. 1911.

Periodicals

American Journal of Science. 15: 328-36. 1828. Report on a course of liberal education, Yale College Faculty.

Atlantic Monthly. 101: 788-98. Je. '08. The case of Greek. Albert G. Keller.

†Atlantic Monthly. 121: 222-31. The case for humility. R. K. Hack.

Blackwood's Magazine. 169: 529-35. Ap. '01. The jeopardy of Greek. H. W. Auden.

Blackwood's Magazine. 179: 667-75. My. '06. Grammar to the wolves. P. A. W. Henderson.

Century. 6: 203-12. Je. '84. What is a liberal education. Charles W. Eliot.

Chautauquan. 43: 200-1. My. '06. Classical language and education.

Classical Weekly. 10: 217-20. My. 21, '17. Classical ideals and American life. Albert Shaw.

Current Opinion. 63: 117-18. Ag. '17. The new world-war that rages around Greek and Latin literature.

Current Opinion. 64: 114-15. F. '18. Practical importance of the war between science and the classics.

Dial. 56:94-5. F. 1, '14. Revivifying the classic languages. Nathan H. Dole.

Education. 30:500-8. Ap. '10. Secondary education. B. F. Harding.

Educational Review. 32:461-72. D. '06. The position of Latin and Greek in American education. Francis W. Kelsey.

Educational Review. 33:36-45. Ja. '07. Humanistic versus realistic education. Friedrich Paulsen.

Educational Review. 33:162-76. F. '07. Latin and Greek in our courses of study. Francis W. Kelsey.

Educational Review. 34:144-50. S. '07. Classical studies. T. E. Page.

Educational Review. 41:489-98. My. '11. The poor results in Latin teaching. J. Remsen Bishop.

Educational Review. 53:483-9. My. '17. Function of Latin in the curriculum. J. Crosby Chapman.

Fortnightly Review. 9:95-105. Ja. '68. Shall we continue to teach Latin and Greek? T. Fowler.

Harper's Monthly. 139:761-4. O '19. The classics and the practical argument. F. M. Colby.

†Harvard Graduates Magazine. 28:69-74. S. '19. Study of the ancients. Albert Bushnell Hart.

Independent. 35:1009-10. Ag 9, '83. Mr. Adams's arraignment of the Greek language.

Independent. 35:1645. D. 27, '83. The university of Berlin and the Greek question.

Independent. 55:47-8. Ja. 1, '03. Classics and the teachers of them.

Independent. 82:59. Ap. 12, '15. Latin or science.

†Independent. 99:185. Ag. 9, '19. An educational hope. Franklin H. Giddings.

Literary Digest. 55:31-2. D. 8, '17. The classics on trial for their lives in Britain.

Nation. 83:6. Jl. 5, '06. Practical side of the classics.

Nation. 94:354-5. Ap. 11, '12. An apostle of Greek.

Nation. 104:676. Je. 7, '17. The battle of the classics.

Nation. 108:112. Ja. 25, '19. Language, literature, or history.

National Educational Association, Proceedings and Addresses, 1908. p. 584-91. A shifting of ideals respecting the efficiency of formal culture studies for all pupils. J. Remsen Bishop.

New Republic. 6: 295. Ap. 15, '16. Books and things.

New Republic. 13: 177-8. D. 15, '17. Prudence and the classics. Emily J. Putnam.

Outlook. 107: 952-3. Ag. 22, '14. Classical studies.

Outlook. 107: 798-805. Ag. 1, '14. That bad education.

Outlook. 107: 957-62. Ag. 22, '14. The classics and a bad education.

Outlook. 121: 365. F. 26, '19. Boys and Latin. A. W. Shepherd.

Outlook. 122: 463. Jl. 23, '19. Classics and culture.

Outlook. 122: 498. Jl. 30, '19. The classics and reconstruction.

Popular Science Monthly. 70: 530-41. Je. '07. The acquisition of language and its relations to thought. Alexander Hill.

†Popular Science Monthly. 79: 369-84. O. '11. Language study and language psychology. E. W. Fay.

Princeton Review. n. s. 13: 127-40. Mr. '84. Our colleges before the country. William G. Sumner.

Putnam's Monthly. 3: 418-24. '08. A classical education. Emily J. Putnam.

School and Society. 5: 608-12. My. 6, '17. The classicist or the utilitarian. Walter H. Siple.

School and Society. 7: 174-8. F. 9, '18. Classical studies. Gonzalez Lodge.

School and Society. 8: 61-8. Jl. 20, '18. The inaugural address of the president of Smith College. William A. Neilson.

School and Society. 8: 171-3. Ag. 10, '18. Humanistic studies and their relation to liberal education. David Snedden.

School and Society. 9: 119-28. Ja. 25, '19. The present status of Greek and Latin as requirements for the A. B. degree in American colleges and universities. Gregory D. Walcott.

*School Review. 14: 660-3. N. '06. Classical literature through translation. Edward O. Sisson.

School Review. 20: 254-61. Ap. '12. The status of Greek. A. A. Trever.

School Review. 21: 618-26. N. '13. Greek and Latin in the schools of Belgium. John G. Winter.

School Review. 22: 45-7. Ja. '14. Effect of the non-requirement of Latin for graduation upon the Latin classes of the high schools. W. R. Pate.

Unpopular Review. 5: 281-93. Ap. '16. "Efficiency" and efficiency. William C. Greene.

Westminster Review. 162:92-9. Jl. '04. Greek and Latin as a modern study. M. E. Robinson.

Yale Review n. s. 6:135-49. O. '16. The case of Latin. A. G. Keller.

Yale Review n. s. 6:150-66. O. '16. Greek in the new university. Thomas D. Goodell.

AFFIRMATIVE REFERENCES

Books and Pamphlets

Adams, James. The vitality of Platonism and other essays. University Press. 1911.

Chap. 6. The moral and intellectual value of classical education.

American Classical League. Dean Andrew F. West, President, Princeton, N. J.

Among the pamphlets printed or reprinted and sold "slightly below cost" are:

- Why study Latin, Willis A. Ellis.
- Our need of the Classics, John H. Finley.
- Greek in English, Rev. Francis P. Donnelly.
- High Schools and Classics, Frederick Irland.
- The study of Latin and Greek in a democracy, Alfred Croiset.
- An engineer's view of classical study, John N. Vedder.
- Why the full Latin requirement should be kept, Latin departments of Mt. Holyoke, Smith, Vassar, and Wellesley Colleges.

Ashmore, Sidney G. The Classics and modern training. G. P. Putnam's Sons. 1905.

Babbitt, Irving. Literature and the American college. Houghton, Mifflin & Co. 1908.

Bennett, Charles E., and Bristol, George P. The teaching of Latin and Greek in secondary schools. Longmans, Green & Co. 1901.

Chap. I. The justification of Latin as an instrument of secondary education.

Bristed, Charles A. Five years in an English University. G. P. Putnam & Sons. 1873.

p. 476-505. The advantages of classical studies, particularly in reference to the youth of our country.

*Bryce, James. The worth of ancient literature to the modern world, General Education Board. 1917.

Byars, William V. The practical value of the Classics. Nixon-Jones Co. 1901.

Chamberlain, D. H. Not a college fetish. Willard Small. 1884.

Clarke, John. The school and other educators. Longmans Green & Co. 1918.

Chap. 10. The place of the classics.

*Classical Association of the Atlantic States. *The practical value of Latin.* 1915.

Classical Association of the Middle West and South. Various pamphlets issued by the publicity committee.

deTocqueville, Alexis. *Democracy in America.* Colonial Press. 1900.

Second Part, First Book, Chp. XV. (Vol. 2, p. 65-7). *The study of Greek and Latin literature peculiarly useful in democratic communities.*

Forbes, Charles H. *The sham argument against Latin.* Classical Association of New England. 1917.

Fouillée, Alfred. *Education from a national standpoint.* D. Appleton & Co. 1892.

Book 3, p. 94-135. *The classical humanities from the national standpoint.*

Game, Josiah B. *Teaching High School Latin.* University of Chicago Press. 1916.

Chap. 1. *Latin's immediate service in education.*
 Chap. 2. *Latin's larger service in education and in life.*
 Chap. 3. *Classical studies on the defensive.*
 Chap. 16. *Questions with answers and suggestions.*

Hamilton, William. *Discussions on philosophy and literature.* Harper & Bros. 1860.

p. 325-44. *On the conditions of classical learning.*

Harrington, Karl P. *Live issues in classical study.* Ginn & Co. 1910.

Jebb, Richard C. *Humanities in education.* Macmillan & Co. 1899.

Jebb, Richard C. *Essays and addresses.* Cambridge University Press. 1907.

p. 545-9. *On present tendencies in classical studies.*
 p. 609-23. *An address delivered at the Mason College.*

Johnston, Charles H. *High school education.* Scribners. 1912.

Chap. 13, p. 257-66, *Latin.*

†Kelsey, Francis W. *Latin and Greek in American education.* Macmillan & Co. 1911.

Kiddle, Henry and Schem, Alexander J. *Cyclopedia of education.* E. Steiger. 1877.

p. 139-42. *Classical studies.*

Knox, Vicesimus. *The works of Rev. V. Knox.* J. Mawman (London). 1834.

Laurie, S. S. *Lectures on language and the linguistic method in the school.* James Thiu (Edinburgh). 1893.

Chap. 9, p. 126-35. *Reasons for teaching Latin.*
 Supplement. p. 179-97. *Language vs. science in the school.*

†Livingstone, R. W. *A Defense of classical education.* Macmillan & Co. 1816.

Mill, John Stuart. *Dissertations and discussions.* Henry Holt & Co. 1874.
Vol. 4. p. 332-407. *Inaugural address.*

*Ministry of Reconstruction (British). *The Classics in British education.* 1919.

Murray, Gilbert. *The religion of a man of letters.* Houghton, Mifflin & Co. 1918.

Owen, William B. *The humanities of the education of the future.* Sherman, French & Co.

Osler, Sir William. *The old humanities and the new science.* Houghton, Mifflin & Co. 1920.

Rouse, W. H. D. *Classical work and method in the twentieth century.* Nicola Zanichelli. Bologna. 1908.

Rouse, W. H. D. *Machines or mind.* Wm. Heineman. 1816.

†Sabin, Frances E. *The relation of Latin to practical life.* Madison, Wis. 1916.

Taylor, Samuel H. *Classical study, Its value illustrated by extracts from the writings of eminent scholars.* W. F. Draper. 1870.

Thring, Edward. *Theory and practice of teaching.* Cambridge University Press. 1883.

Urquhart, D. H. *Commentaries on classical learning.* London. 1803.

†West, Andrew F. *The value of the Classics.* Princeton University Press. 1917.

West, Andrew F. *The war and education.* Princeton University Press.

Wickersham, James P. *Methods of instruction.* J. B. Lippincott & Co. 1865.
p. 275-80. *Instruction in the dead languages.*

Periodicals

American Institute of Electrical Engineers, *Transactions of.* 28: 1103-31. Jl. 1, '09. *The value of the Classics in engineering education.* Charles P. Steinmetz et al.

American Institute of Instruction, *Lectures,* 1867. p. 81-7. *Place of science and the classics in a liberal education.* Albert Harkness.

American Institute of Instruction, *Lectures*, 1876. p. 39-50.
Moral instruction and discipline in the study of the classical
languages and literatures. M. H. Buckham.

Arbitrator. 1:3-6, 11. S. '18. The immortal conflict. Andrew
F. West.

Atlantic Monthly. 51:171-9. F. '83. Herbert Spencer's theory
of education. E. R. Sill.

Atlantic Monthly. 53:71-9. Ja. '84. The study of Greek. A. P.
Peabody.

†Atlantic Monthly. 119:793-801. Je. '17; 120:94-104. Jl. '17. The
assault on humanism. Paul Shorey.

†Atlantic Monthly. 124:47-53. Jl. '19. High schools and Classics.
Frederick Ireland.

Bibliotheca Sacra. 42:327-50. Ap. '85. Greek among required
studies. William G. Frost.

†Blackwood's Magazine. 109:182-94. F. '71. Lord Lyttelton's
letter to the Vice Chancellor of Oxford on the study of Greek.

Chautauquan. 43:121-32. Ap. '06. The influence of the Classics
on American literature. Paul Shorey.

Chautauquan. 43:141-3. Ap. '06. The influence of the Classics
in the lives of well known moderns. Vincent V. Beede.

Classical Journal. 1:35-6. Ja. '06. M. Ingres on the value of
classical education.

Classical Journal. 2:5-22. N. '06. Our problem and a platform.
Thomas D. Goodell.

Classical Journal. 5:232-6. Mr. '10. The aims of classical train-
ing. J. J. Schlicher.

Classical Journal. 5:322-7. My. '10. The classics and the pupil.
J. J. Schlicher.

Classical Journal. 7:174-80. Ja. '12. Culture and cult. Charles
H. Forbes.

Classical Journal. 7:349-51. My. '12. An Exhibit in answer to
the high school boy's question; "What's the use of Latin?"
Frances E. Sabin.

Classical Journal. 8:230-3. Mr. '13. What's the use of Latin.
Frances E. Sabin.

†Classical Journal. 9:94-101. D. '13. The value of the Classics
to students of English. Joseph V. Denney.

Classical Journal. 10:126-37. D. '14. The practical bearing of
high school Latin. H. R. Fairclough.

Classical Journal. 11: 208-15. Ja. '16. The Latin in English, or interest that will stick. M. A. Leiper.

Classical Journal. 13: 309-13. F. '18. The stupidest of losses.

Classical Weekly. 1: 186-8. Ap. 11, '08. Classics in the modern school. W. H. D. Rouse.

Classical Weekly. 1: 194-6. Ap. 25, '08. Classics in the modern school. W. H. D. Rouse.

Classical Weekly. 2: 74-7. D. '19, '08. Mr. Asquith on classical culture.

Classical Weekly. 3: 18-22. O. 2, '09. The value of the Classics; an outsiders view. W. W. Comfort.

Classical Weekly. 3: 175-6. Ap. 2, '10. On the Value of the Classics in Engineering Education. Charles J. Steinmetz.

Classical Weekly. 4: 211-13. My. 13, '11. Why Study Greek? Charles H. Weller.

Classical Weekly. 6: 146-9. Mr. 15, '13. The Classics. George M. Lightfoot.

Classical Weekly. 8: 2-4. O. 3, '14. Liberal Studies in the high school curriculum. Katherine M. Puncheon.

Classical Weekly. 10: 8. O. 2, '16. Three early defenses of the Classics. William Chislett.

Classical Weekly. 11: 129-31. F. 25, '18. A plea for the Classics.

Contemporary Review. 34: 802-15. Mr. '79. On the worth of a classical education. Bonamy Price.

Contemporary Review. 117: 673-81. Ap. '20. The reconstruction of public school education. E. C. E. Owen.

Dial. 66: 390-3. Ap. '19. University reconstruction and the Classics. Royal C. Nemiah.

Eclectic Magazine. 99: 550-9. O. '82. Literature and Science Mathew Arnold.

†Education. 23: 257-69. Ja. '03. The advantages which accrue from a Classical education. Caroline R. Gaston.

Education. 23: 347-55. F. '03. The advantages which accrue from a Classical education. Caroline R. Gaston.

Education. 31: 652-6. Je. '11. Some uses of the Classics to a modern student. Preston S. Moulton.

†Education. 32: 51-7. S. '11. A brief for the Classics. Edward P. Davis.

Education. 33: 11-8. S. '12. Shall Latin go? Alice Ranlett.

Education. 37: 440-4. Mr. '17. More than two years of Latin. Carrie B. Allen.

†Education. 38: 668-84. My. '18. "The modern school." Paul Shorey.

Educational Review. 17: 313-6. Ap. '99. A brief for Latin. William T. Harris.

Educational Review. 22: 162-79. S. '01. Imagination in the study of the Classics. Gonzalez Lodge.

Educational Review. 23: 407-19. Ap. '02. The Classics in modern education. William Baird.

Educational Review. 29: 185-90. F. '05. A plea for Caesar. Katharine Darrin.

†Educational Review. 33: 59-76. Ja. '07. The value of Latin and Greek as educational instruments. Francis W. Kelsey.

Educational Review. 39: 342-50. Ap. '10. The case of Greek again. Hamilton F. Allen.

Educational Review. 42: 304-7. O. '11. Business men and the Classics.

Educational Review. 43: 449-60. My. '12. May the modern languages be regarded as a satisfactory substitute for the Classics. C. F. Kayser.

Educational Review. 47: 279-90. Mr. '14. Greek at Princeton. Andrew F. West.

Educational Review. 49: 37-47. Ja. '15. The teaching of English and the study of the Classics. Lane Cooper.

Educational Review. 52: 174-82. S. '16. The purpose of college Greek. Virginia C. Gildersleeve.

†Educational Review. 52: 501-6. D. '16. Measurements of effect of Latin on English vocabulary of high school students in commercial courses. Albert S. Perkins.

Educational Review. 53: 248-64. Mr. '17. Some reflections on the liberal curriculum. Grace Goodale.

Educational Review. 54: 177-83. S. '17. Is American higher education improving. Nicholas Murray Butler.

Educational Review. 54: 293-306. O. '17. Classics and the reformer. H. C. Nutting.

†Educational Review. 54: 433-8. D. '17. Our Birthright or a mess of pottage. Andrew F. West.

Educational Review. 54: 439-50. D. '17. The passing of the Classics. Grace H. Macurdy.

†Educational Review. 54: 500-3. D. '17. Is the study of Latin advantageous to the study of English? M. Theresa Dallam.

Educational Review. 56: 117-32. S. '18. Latin as a utility. Albert S. Perkins.

Educational Review. 56: 230-54. O. '18. Our common Latin heritage. Frank G. Moore.

Educational Review. 57: 129-40. F. '19. Post Bellum Latin. Frank G. Moore.

Educational Review. 57: 141-52. F. '19. The humanities after the war. Andrew F. West.

Educational Review. 59: 113-22. F. '20. Education versus apprenticeship. John M. Vedder.

Engineering Magazine. 46: 97-9. O. '13. The Classics in engineering education. Charles P. Steinmetz.

Fortnightly Review. 31: 290-300. '79. Shall we give up Greek? Edward A. Freeman.

†Fortnightly Review. 78: 866-80. N. '02. Are the Classics to go? J. P. Postgate.

Fortnightly Review. 98: (n. s. 92) 427-37. S. '12. The Classical spirit. H. Belloc.

*Fortnightly Review. 107: 551-66. Ap. 2, '17. The worth of ancient literature to the modern world. James Bryce.

Harvard Graduates Magazine. 27: 171-5. D. '81. In behalf of the Classics. Fred B. Lund.

Independent. 30: 336-7. Mr. 13, '84. The Popular Science Monthly and the Classics.

Independent. 55: 104-5. Ja. 8, '03. The Classics and the historic sense.

Independent. 62: 107-8. Ja. 10, '07. Scientific versus Classical education.

International Review. 1: 781-95. N. '74. Study of the Greek and Latin Classics. Charles Elliott.

Johns Hopkins Alumni Magazine. 7: 147-56. Mr. '19. The future place of the humanities in education. Kirby F. Smith.

Literary Digest. 55: 32. N. 10, '17. How war saves the Classics. Living Age. 154: 579-88. S. 9, '82. Literature and Science. Mathew Arnold.

Living Age. 266: 433-7. Ag. 13, '10. Humanistic education not without Latin. W. H. D. Rouse.

Living Age. 268: 103-6. Ja. 14, '11. The place of the Classics in secondary education. W. H. D. Rouse.

BIBLIOGRAPHY

Living Age. 275: 144-52. O. 19, '12. The Classical spirit. Hilaire Belloc.

*Living Age. 293: 522-34. Je. 2, '17. The worth of ancient literature to the modern world. James Bryce.

Living Age. 302: 37-41, Jl. 5, '19. The humanities in education. Lord Charnwood.

†Michigan Alumnus. 13: 13-23 and 60-70. O. and N. '06. A symposium on the value of the humanistic, particularly classical, studies as a preparation for the study of medicine and of engineering from the point of view of these professions. Francis W. Kelsey et al.

Nation. 92: 164-5. F. 16, '11. Greek and Science. Charles D. Adams.

Nation. 92: 213-14. Mr. 2, '11. Science and the Classics. H. H. Yeames.

Nation. 93: 210-11. S. 7, '11. The efficiency of the student of Greek. J. W. Hewitt.

Nation. 95: 229-30. S. 12, '12. Learning English thorough the Classics. W. H. D. Rouse.

Nation. 96: 465. My. 8, '13. Latin and modern languages. Philo M. Buck.

Nation. 102: 705. Je. 29, '16. Dr. Flexner's modern school. H. R. Fairclough.

Nation. 104: 122-3. F. 1, '17. Bryce on education.

Nation. 108: 13-4. Ja. 4, '19. The modern world and the Latin classroom. Richard M. Gummere.

Nation. 108: 354. Mr. 8, '19. Another plea for the Classics. Jacques W. Redway.

Nation. 109: 11-2. Jl. 5, '19. Measuring the immeasurable. Grant Showerman.

Nation. 109: 163. Ag. 9, '19. The great laboratory.

National Educational Association, Proceedings and Addresses, 1873. p. 131-40. Classical studies. Edward S. Joynes

National Educational Association. Proceedings and addresses, 1874. p. 187-204. A defense of Classical studies. James D. Butler.

National Educational Association. Proceedings and Addresses. 1902. p. 462-7. Round table conference. Lafayette Bliss et al.

National Educational Association. Proceedings and Addresses. 1903. p. 470-6. Classical conference. Henry W. Callahan et al.

New Englander. 35:222-50. Ap. '76. The value of Classical studies. Daniel H. Chamberlain.

†Nineteenth Century. 12:216-30. Ag. '82. Literature and science. Mathew Arnold.

Nineteenth Century. 68:1082-6. D. '10. The place of the Classics in secondary education. W. H. D. Rouse.

Nineteenth Century. 85:927-42. My. '19. The Classics and democracy. Foster Watson.

†North American Review. 11:413-23, O. 1820. The study of the Classics.

†North American Review. 101:578-84. O. '65. Classical and scientific studies.

†North American Review. 104:610-8. Ap. '67. Classical and utilitarian studies.

†North American Review. 112:229-35. Ja. '71. Classical study.

†North American Review. 138:151-62. F. '84. Must the Classics go? Andrew F. West.

North American Review. 212:355-61. S. '20. The case for the humanist. Percy H. Houston.

Outlook. 93:87-8. S. 18, '09. The value of the Classics in engineering education.

Outlook. 107:285-91. Je. 6, '14. That bad education.

Outlook. 107:398-408. Je. 20, '14. The Classics as an engineer sees them. Elmer L. Corthell.

Outlook. 120:409-12. N. 13, '18. A Classic instance. Henry Van Dyke.

Outlook. 121:10. Ja. 1, '19. What scientists think about the Classics.

Outlook. 121:318-20. F. 19, '19. What Latin is good for. A. W. Burr.

Popular Science Monthly. 21:737-51. O. '82. Literature and science. Mathew Arnold.

†Princeton Review n. s. 12:105-28. S '83. A college fetish. Noah Porter.

Princeton Review n. s. 13:111-26. Mr. '84. The study of Greek. George P. Fisher.

Princeton Review n. s. 14:195-218. S. '84. Greek and a liberal education. Noah Porter.

St. Mary's College Bulletin (St. Mary's, Kansas). 2:8-36. Ja. '06. Study of the Classics.

BIBLIOGRAPHY

†St. Mary's College Bulletin (St. Mary's, Kansas). 6:3-24. Ja.
'10. Popular errors about Classical studies. Rev. Thomas E.
Murphy.

Saturday Review. 31:266-7. Mr. 4, '71. The use of Greek.

Saturday Review. 31:433-4. Ap. 8, '71. Greek and Latin.

School and Society. 2:251-2. Ag. 14, '15. A study in the relation of Latin to English composition. Lynn H. Harris.

School and Society. 3:361-6. Mr. 11, '16. Is there still room for the humanities in a college of liberal arts? William A. Webb.

School and Society. 4:858-9. D. 2, '16. The Cumulative argument for the study of Latin. H. C. Nutting.

School and Society. 5:261-2. Mr. 3, '17. General discipline and the study of Latin. H. C. Nutting.

School and Society. 5:707-9. Je. 16, '17. On the Classics in translation. H. C. Nutting.

School and Society. 5:709-10. Je. 16, '17. The battle of the Classics.

School and Society. 7:121-6. F. 2, '18. Latin and the A. B. Degree. H. C. Nutting.

†School and Society. 7:413-17. Ap. 6, '18. The humanities and the sciences in England. Charles Knapp.

School and Society. 8:31-5. Jl. 13, '18. The immortal conflict. Andrew F. West.

School and Society. 8:215-20. Ag. 24, '18. The need to define anew the values of Latin. Milton E. Blanchard.

School and Society. 8:564-6. N. 9, '18. Vocational and humanistic. H. C. Nutting.

†School and Society. 9:391. Mr. 29, '19. The passing of the Classics. New York Times.

School and Society. 9:565-6. My. 10, '19. Classical training and efficiency. Alexander Duane.

†School and Society. 10:54-5. Jl. 12, '19. High schools and Classics. Frederick Ireland.

School and Society. 10:97-9. Jl. 26, '19. Embattled Greek. Lewis R. Harley.

School and Society. 11:310-3. Mr. 13, '20. Educational ideals of today. Lewis R. Harley.

School Review. 6:630-42. N. '98. The true spirit of classical culture. Andrew F. West.

School Review. 12:604-6. S. '04. The study of the Classics in relation to modern life. G. George H. Locke.

School Review. 13:441-57. Je. '05. The nature of culture studies. R. M. Wenley.

School Review. 14:389-414. Je. '06. A symposium on the value of classical studies as a preparation for the study of medicine and of engineering. Victor C. Vaughan et al.

School Review. 15:409-35. Je. '17. A symposium on the value of classical studies as a preparation for the study of law. Merritt Starr et al.

School Review. 16:370-90. Je. '08. A symposium on the value of classical studies as a preparation for theology. William D. Mackenzie and A. J. Noak.

School Review. 16:533-7. O. '08. Classical studies as a preparation for the study of theology. Hugh Black.

School Review. 16:561-79. N. '08. Greek in the high school and the question of the supply of candidates for the ministry. Francis W. Kelsey.

†School Review. 17:369-403. Je. '09. A symposium on the value of classical studies as a preparation for men of affairs. James Bryce et al.

School Review. 17:498-501. S. '09. Classics and modern life. James B. Scott.

School Review. 18:441-59. S. '10. The Classics in European education. Edward K. Rand.

School Review. 18:513-29. O. '10. The Classics and the elective system. R. W. Wenley.

†School Review. 18:585-617. N. '10. The care for the classics. Paul Shorey.

†School Review. 19:657-79. D. '11. The practical value of humanistic studies. William G. Hale.

School Review. 20:179-81. Mr. '12. Must Greek go? Edwin L. Miller.

School Review. 20:161. Mr. '12. Must Greek go? Martin L. D'Ooge.

†School Review. 20:186-90. Mr. '12. The psychological value of the Classics. A. E. Bartlett.

Teachers College Record. 18:111-21. Mr. '17. The value of the classics in training for citizenship. Gonzalez Lodge.

†University of Colorado Bulletin. 14:1-37. S. '14. Latin and Greek in education. Nine articles by members of the faculty.

Unpopular Review. 8:64-75. Jl. '17. A lost ideal. C. A. Cornelison.

BIBLIOGRAPHY

NEGATIVE REFERENCES

Books and Pamphlets

†Adams, Charles Francis, Jr. A college fetich. Lee and Shepard. 1883.

This memorable address, delivered before the Harvard Chapter of the Fraternity of Phi Beta Kappa, originally printed as a pamphlet, has been reprinted (1) Three Phi Beta Kappa Addresses, Houghton, Mifflin & Co., 1907. (2) Modern eloquence, Vol. 7, p. 10-22, The University Society, 1900. (3) The Independent, 35:997-1000, Aug. 9, 1883.

Atkinson, William P. Classical and scientific studies and the great schools of England. Sever & Francis (Cambridge). 1865.

*Bain, Alexander. Education as a science. D. Appleton & Co. 1899.

Chap. X. The value of the classics.

Chap. XI. The renovated curriculum.

Benson, Arthur C. Cambridge essays on education. Cambridge University Press. 1918.

Benson, Arthur C. From a college window. Smith, Elder & Co. (London) 1906.

Chap. IX. p. 154-77. Education.

Benson, Arthur C. The house of quiet, an autobiography. John Murray. 1907.

p. 30-42.

†Bigelow, Jacob. Modern inquiries. Little, Brown & Co. 1867.

†Bigelow, Jacob. Remarks on Classical and utilitarian studies. Little, Brown & Co. 1867.

p. 37-89. On classical and utilitarian studies.

Burman, Peter. Oration against the studies of humanity. J. Roberts (London). 1721.

Cooke, Josiah P. The Greek question. 1883.

Cooke, Josiah P. Scientific culture and other essays. D. Appleton & Co. 1881.

Cooke, Josiah P. Credentials of science the warrant of faith. Robert Carter & Bros. 1888.

Eliot, Charles W. Latin and the A. B. degree. General education board. 1917.

Emerson, Ralph Waldo. Journals of R. W. Emerson. 1883-5.

Farrar, Rev. F. W. Essays on a liberal education. Macmillan & Co. 1868.

Chap. 2. The theory of classical education, Henry Sidgwick.

Chap. 9. On the present social results of classical education, Lord Houghton.

Flexner, Abraham. *A modern school*. General education board. 1916.

Hall, G. Stanley. *Youth, its education, regimen, and hygiene*. D. Appleton & Co. 1907.
Vol. II. p. 454-9.

Hall, G. Stanley. *The psychology of adolescence*. D. Appleton & Co. 1905.

Hodgson, W. B. *Classical instruction, its use and abuse*. John Chapman (London). 1854.

Huxley, T. H. *Lay sermons*. D. Appleton & Co. 1871.

Huxley, Thomas H. *Science and culture*. D. Appleton & Co. 1882.

Huxley, Thomas H. *Science and education*. D. Appleton & Co. 1894.

†Lankester, Sir E. Ray. *Natural science and the Classical system in education*. Wm. Heineman. 1918.

Lankester, Sir. E. Ray. *Science and education*. Wm. Heineman. 1917.
Chap. 6. *The case against the classical languages*. H. G. Wells.
Chap. 7. *A modern education*. H. G. Wells.

Lapp, John A. and Mote, Carl H. *Learning to Earn*. Bobbs-Merrill Co. 1915.

Leacock, Stephen. *Behind the Beyond*. John Lane Co. 1913.
p. 183-95. *Homer and Humbug, an academic discussion*.

M.E. *How much longer are we to continue teaching nothing more than what was taught two or three centuries ago?* J. Hatchard & Son (London). 1850.

†Mackie, Ransom A. *Education during adolescence*. E. P. Dutton & Co. 1920.

Rosebury, Lord. *Address to students of University of Glasgow*. 1900.

†Rumford (pseud.). *The claims of Classical learning examined and refuted by argument and by the confessions of scholars*. Monroe & Francis (Boston). 1824.

Rush, Dr. Benjamin. *Essays, literary, moral, and philosophical*. T. & S. F. Bradford. (Philadelphia). 1798.

Sidgwick, Henry. *Miscellaneous essays and addresses*. Macmillan & Co. 1904.
Chap. 12. p. 270-319. *The theory of classical education*.

Smith, Rev. Sydney. *Works of Rev. Sydney Smith*. London. 1839.
Vol. 1, p. 211-30. *Professional education; too much Latin and Greek*.

†Spencer, Herbert. *Education: intellectual, moral, and physical.* D. Appleton & Co. 1865.

Stevenson, W. *Remarks on the very inferior utility of classical learning.* H. D. Symonds (London). 1796.

Thorpe, Francis N. *Franklin's influence in American education.* 1902.
Printed in report U.S. Commissioner of Education. 1902. Vol. 1, p. 91-190. See p. 117-8.

Youmans, E. L. et al. *The culture demanded by modern life.* D. Appleton & Co. 1867.

Wells, H. G. *The outline of history.* Macmillan & Co. 1920. Vol. 2, p. 390-1, 427-31.

Winchell, Alexander. *Shall we teach geology?* S. C. Griggs. 1889.
Chap. 6. p. 55-82. *Classics and culture.*

The relative importance of ancient and modern languages considered as branches of general education. D. Appleton & Co. 1856.

Periodicals

American Institute of Instruction, *Lectures*, 1867. p. 87-91. *Place of the sciences and the Classics in a liberal education.* William P. Atkinson.

Arbitrator. 1:7-13. S. '18. *New schools for old.* Alexander Fichandler.

Atlantic Monthly. 104:260-73. Ag. '09. *A classical education in America.* Homer Edmiston.

Atlantic Monthly. 119:352-61. Mr. '17. *The case against compulsory Latin.* Charles W. Eliot.

Atlantic Monthly. 119:452-64. Ap. '17. *Education as mental discipline.* Abraham Flexner.

Century. 28:203-12. Je. '84. *What is a liberal education.* Charles W. Eliot.

Contemporary Review. 35:832-42. '79. *The classical controversy.* Alexander Bain.

Contemporary Review. 60:582-92. O. '91. *The position of Greek in the universities.* J. E. C. Welldon.

Current Literature. 29:1-3. Jl. '00. *The educational drift.*

Edinburgh Review. 15:40-53. O. 1809. *Edgeworth's "Professional education" or too much Latin and Greek.* Rev. Sydney Smith.

Education. 25: 421-7. Mr. '05. The unsettling of the doctrine of formal discipline. James H. Harris.

Education. 38: 659-67. My. '18. The modern school. Charles W. Eliot.

†Education. 39: 521-36. My. '19. The Classicists and nature's law. Henry L. Clapp.

Educational Review. 33: 467-85. My. '07. The educational value of the classical languages. Irving King.

†Fortnightly Review. 107: 567-74. Ap. 2, '17. The case against the classical languages. H. G. Wells.

†Independent. 35: 997-1000. Ag. 9, '83. A college fetish. Charles Francis Adams, Jr.

Independent. 96: 41. O. 12, '13. The cruel government.

Literary Digest. 44: 1345-6. Je. 29, '12. The uselessness of Greek.

Literary Digest. 53: 1709-10. D. 30, '16. War on the classics in Germany.

Living Age. 246: 806-11. S. 23, '05. A classical education. Arthur C. Benson.

Living Age. 248: 461-8. F. 24, '06. From a college window. Arthur C. Benson.

Living Age. 264: 737-42. Mr. 19, '10. Humanistic education without Latin. Arthur C. Benson.

Living Age. 267: 666-73. D. '10. The place of Classics in secondary education. Arthur C. Benson.

†Living Age. 269: 606-18. Je. 3, '11. Compulsory science versus compulsory Greek. Sir Ray Lankester.

Living Age. 305: 607-9. Je 5, '20. The Classics and Classical humbug. E. R. Dodds.

Methodist Quarterly. 49: 221-36. Ap. '67. Educational qualifications for the ministry. Rev. B. H. Nadal.

Nation. 34: 32-3. Ja. 12, '82. Classical and non-classical. A. L. K. Volkmann and C. A. Eggert.

Nation. 105: 65-6. Jl. 19, '17. Latin in the schools. George F. Miller.

Nature. 83: 161-2. Ap. 7, '10. Classics and science in education. A. E. Crawley.

†Nature. 94: 125-35. O. 1, '14. Educational science. John Perry.

Nature. 97: 120-1. Ap. 6, '16. Science versus Classics. E. A. Schaefer.

Nature. 97: 230-1. My. 11, '16. Science in education and the civil services.

Nature. 97: 251-2. My. 18, '16. Science and classics in modern education. Sir Edward A. Schaefer.

Nature. 99: 1-2. Mr. 1, '17. Classical education.

Nature. 99: 141-2. Ap. 19, '17. Education and research. H. G. Wells.

Nature. 99: 361-2. Jl. 5, '17. The classical system of education. E. A. Schaefer.

Nature. 103: 234-5. My. 22, '19. Science and the Classics.

Nature. 103: 387-8. Jl. 17, '19. Reconstruction problems.

National Educational Association, Proceedings and Addresses 1873. p. 141-63. Liberal education of the nineteenth century. W. P. Atkinson.

†New England Magazine n. s. 36: 246-8. Ap. '07. The passing of the linguist. Austin Bierbower.

New England Magazine n. s. 37: 167-73. O. '07. The culture-value of modern as contrasted with that of ancient languages. G. Stanley Hall.

New Republic. 5: 328-30. Ja. 29, '16. The Classical compromise. Meyer Cohn.

Nineteenth Century. 57: 244-51. F. '05. Compulsory Greek as a national question. J. Westlake.

Nineteenth Century. 68: 868-76. N. '10. The place of Classics in secondary education. Arthur C. Benson.

Nineteenth Century. 69: 499-514. Mr. '11. Compulsory science versus compulsory Greek.

Nineteenth Century. 83: 810-23. Ap. '18. A defense of the modern humanities. Cloutesley Brereton.

†Outlook. 106: 848-52. Ap. 18, '14. Why I have a bad education. Walter P. Hall.

Outlook. 107: 339-43. Je. 13, '14. That bad education. Frank B. Rowell et al.

Outlook. 107: 408-11. Je. 20, '14. The Classics as an educator sees them. A. F. Nightingale.

Pedagogical Seminary. 9: 92-105. Mr. '02. Adolescence and high school English, Latin, and Algebra. G. Stanley Hall.

†Pedagogical Seminary. 9: 161-8. Je. '02. The teaching of English. Alexander F. Chamberlain.

†Pedagogical Seminary. 12: 1-26. Mr. '05. Latin in the high school. Edward Conradi.

†Pedagogical Seminary. 19: 492-509. D. '12. A critique of high school Latin. Clarence L. Staples.

Popular Science Monthly. 1:707-19. O. '72. English against the Classics.

Popular Science Monthly. 7: 402-10. Ag. '75. The higher education. F. W. Clarke.

Popular Science Monthly. 15: 631-42. S. '79. The classical controversy. Alexander Bain.

†Popular Science Monthly. 17: 145-55. Je. '80. The Classics that educate us. Paul R. Shipman.

Popular Science Monthly. 18: 412-4. Ja. '81. The study of Greek at Cambridge.

Popular Science Monthly. 23: 116-20. My. '83. Greek and Latin against nature and science.

†Popular Science Monthly. 24: 1-6. N. '83. The Greek question. Josiah P. Cooke.

†Popular Science Monthly. 24: 117-22. N. '83. The current study of Classics a failure.

†Popular Science Monthly. 24: 265-9. D. '83. Dead language studies necessarily a failure.

Popular Science Monthly. 24: 269-71. D. '83. Queer defenses of the classics.

Popular Science Monthly. 24: 289-306. Ja. '84. The classical question in Germany. Edmund J. James.

Popular Science Monthly. 24: 412-4. Ja. '84. "Church and State" Function of dead languages.

†Popular Science Monthly. 24: 414-6. Ja. '84. Learning one language by studying others.

†Popular Science Monthly. 24: 558-60. F. '84. Education without dead languages.

Popular Science Monthly. 24: 674-5. Mr. '84. Science versus the Classics. C. A. Eggert.

Popular Science Monthly. 24: 702-6. Mr. '84. Collegiate influence upon the lower education.

Popular Science Monthly. 25: 124-9. My. '84. Yale professors on college studies.

Popular Science Monthly. 25: 412-4. Jl. '85. President Eliot on liberal education.

Popular Science Monthly. 25: 566. Ag. '84. Sir John Lubbock on Classical and scientific education.

BIBLIOGRAPHY

Popular Science Monthly. 25: 701-4. S. '84. The college fetish once more.

†Popular Science Monthly. 26: 20-30. N. '84. German testimony on the Classics question. Frederick A. Fernald.

Popular Science Monthly. 31: 14-19. My. '87. Present status of the Greek question. Edmund J. James.

Popular Science Monthly. 31: 271-3. Je. '87. The Greek question again.

†Popular Science Monthly. 73: 28-31. Jl. '08. The high school course. David Starr Jordan.

†Popular Science Monthly. 77: 554-60. D. '10. Classics and the college course. John J. Stevenson.

Popular Science Monthly. 77: 561-9. D. '10. Learning Foreign Language. Charles W. Super.

School and Society. 2: 750-1. N. 20, '15. The relation of Latin to work in English. Paul J. Kruse.

†School and Society. 6: 58-60. Jl. 14, '17. Does the study of high school Latin improve high school English. Myron J. Wilcox.

School and Society. 8: 518-21. N. 2, '18. The importance of the Classics in education from the standpoint of medicine. John L. Heffron.

†School and Society. 9: 390-1. Mr. 29, '19. The passing of the Classics. New York Tribune.

†School and Society. 10: 163-6. Ag. 9, '19. Classics. John J. Stevenson.

School and Society. 10: 263-4. Ag. 29, '19. A real value of Latin. Quintus II.

School and Society. 10: 387. S. 27, '19. A real value of Latin. W. A. Merrill.

School and Society. 10: 464-6. O. 18, '19. A real value of Latin. Charles C. Peters.

School and Society. 11: 405-6. Ap. 3, '20. Greek at Oxford.

School Review. 9: 649-65. D. '01. How far is the present high school and early college training adapted to the nature and needs of adolescents? G. Stanley Hall.

School Review. 16: 360-9. Je. '08. Substitute for the Classics. Fred N. Scott.

*School Review. 23: 697-703. D. '15. Some experimental data on the value of studying foreign languages. Daniel Starch.

BIBLIOGRAPHY

li

*School Review. 26: 576-99. O. '18. Liberal education without Latin. David Snedden.

Science. 11: 801-7. My. 25, '00. Should Latin and Greek be required for the degree of Bachelor of Arts? John J. Stevenson.

†Science n. s. 45: 481-2. My. 18, '17. Science and classical education. H. G. Wells.

†Westminster Review. 4: 147-76. Jl. 1825. Present system of education. George Jardine.

Westminster Review. 53: 393-409. '50. Classical education.

Westminster Review. 60: 450-98. O. '53. The school claims of languages, ancient and modern.

Westminster Review. 72: 1-41. Jl. 1, '59. What knowledge is of most worth.



SELECTED ARTICLES ON THE STUDY OF LATIN AND GREEK

INTRODUCTION

The classical system of education may be said to date from the fall of Constantinople in 1453. When the eastern capital was taken by the Turks, the scholars fled and scattered over western Europe, carrying with them many ancient manuscripts, which contained, locked up in the dead languages, the best of the knowledge and the literature that then existed in the world. Through the next hundred years the study of the ancient classics, then called the new learning, was slowly, often reluctantly, accepted as the basis of education. It was the Jesuit Fathers who first proved to the world the educational value of the study of Latin and Greek.

To England, and from England to America, the classical system spread. The institutions of higher education in this country were truly classical until quite recently. As a rule both Latin and Greek were required for admission to college and were prescribed studies in college. From the founding of Harvard College in 1636 until past the middle of the nineteenth century a college course was made up very largely of the study of Latin, Greek, Ancient History, Philology, and Mathematics.

Shortly after the middle of the nineteenth century the demand for modernized higher education began to affect the curricula of American colleges and universities. The Morrill Act, approved by President Lincoln on July 2, 1862, provided that the Federal Government should give a tract of land to any state that would maintain at least one "College where the leading objects shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the legislature of the State may respectively prescribe in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions

SELECTED ARTICLES

of life." The older colleges slowly adjusted themselves to the new competition and to the popular demands for modern education by the gradual adoption of the elective system and by decreasing the amount of the dead languages required for admission or prescribed during the college course. At the close of the first decade of the twentieth century many of our colleges and universities require no dead language study either for admission or for graduation, while scarcely any hold to the old requirements.

Latin is now being studied by about two fifths of the students in our high schools and academies and by a very much smaller percentage of the students in the colleges and universities. Greek, on the other hand, has practically disappeared from our educational system, being now studied by less than one per cent of the students in our secondary schools. The following table, arranged from figures given in the report of the U. S. Commissioner of Education for 1916 (p. 487-9), shows these facts as regards the public high schools in America during the past thirty years:

AMERICAN PUBLIC HIGH SCHOOLS

Year	Total Students	Number Studying Latin	Number Studying Greek	Per cent Studying Latin	Per cent Studying Greek
1890	202,963	70,411	6,202	34.69	3.05
1895	350,099	153,950	10,850	43.97	3.10
1900	530,425	262,767	14,813	50.61	2.85
1905	679,702	341,248	10,002	50.21	1.47
1910	739,143	362,548	5,511	49.05	.75
1915	1,165,495	434,925	3,351	37.32	.29

Although the private high schools in 1915 had less than one tenth of the total high school enrollment, still in that year they were giving instruction in Greek to more than twice as many students as were the public high schools, as is shown in the following table.

PRIVATE HIGH SCHOOLS IN THE UNITED STATES

Year	Total Students	Number Studying Latin	Number Studying Greek	Per cent Studying Latin	Per cent Studying Greek
1890	94,931	29,733	6,667	31.32	7.02
1895	118,347	51,056	11,300	43.14	9.55
1900	188,816	52,089	10,056	46.92	9.77
1905	107,207	49,819	7,156	46.47	6.67
1910	78,510	42,954	5,228	54.71	6.61
1915	125,692	69,060	7,320	54.94	5.82

These two tables may be combined to produce the following statement:

PUBLIC AND PRIVATE HIGH SCHOOLS

Year	Total Students	Number Studying Latin	Number Studying Greek	Per cent Studying Latin	Per cent Studying Greek
1890	297,894	100,144	12,869	33.62	4.32
1895	468,446	205,006	22,159	43.76	4.73
1900	719,241	314,856	24,869	49.47	3.95
1905	786,909	391,067	17,158	49.69	2.18
1910	817,653	405,502	10,739	49.59	1.31
1915	1,291,187	503,985	10,671	39.03	.83

From these figures we see that more than ninety-nine per cent of the high school pupils in America are not studying Greek, and that more than sixty per cent of them are not taking Latin. It is unfortunate that similar figures for the colleges and universities are not available, and that these figures should begin with so late a date as 1890. Were it possible to give figures covering both the high schools and the colleges for the past hundred years, they would tell a most interesting story.

The following table gives the percentage of students in the public and private high schools combined who were studying each of the subjects named during the years stated. It is the best data available on this point, but it does not by any means convey to the average mind an accurate idea. Rather it seems to give the impression that in 1915, for instance, about one half of the students enrolled were taking the algebra offered in the schools, about two fifths were taking the Latin offered, and about one fourth the geometry. Latin is usually a four year study while algebra and geometry are usually one and a half year studies, but only one year studies in some schools. If a high school had just four hundred students, and these were equally divided with one hundred in each of the four years, and if each student took at the appointed time the full four years of Latin and the full year and a half of algebra and geometry, then that school would appear in the following table with these results; Latin 100 per cent, Geometry 50 per cent, Algebra 50 per cent, while the fact is that each student is taking all of each of these subjects that the school gives. In other words, the maximum percentage that geometry or algebra could make in such a table is somewhat over fifty as the number of first and second year students is always more than half of the total enrollment. When this table states that the percentage of students taking English Literature was 56.07 in 1915, it does not mean that only about

SELECTED ARTICLES

half of the students are taking English literature, but rather that the average student takes it only during about half of his course.

PERCENTAGE OF STUDENTS IN THE PUBLIC AND PRIVATE HIGH SCHOOLS TAKING THE STUDIES NAMED

	1890	1895	1900	1905	1910	1915
English literature.	...	...	41.19	48.14	57.05	56.07
Rhetoric	...	31.31	37.70	47.30	56.59	55.61
History	27.83	34.65	37.80	40.50	55.67	51.46
Algebra	42.77	52.40	55.08	56.43	56.92	49.26
Latin	33.62	43.76	49.97	49.69	49.59	39.03
Vocal Music	...	...	...	...	...	32.19
Geometry	20.07	24.51	26.75	27.84	30.87	26.80
German	11.48	12.58	15.06	20.34	23.60	24.19
Drawing	...	...	...	...	...	23.04
Physical geography	...	22.44	22.88	21.05	19.14	14.66
Physics	21.36	22.15	18.88	15.06	14.79	14.28
Domestic economy	...	...	...	...	4.14	12.69
Manual training	...	...	...	...	...	10.64
French	9.41	9.77	10.43	11.40	11.70	10.54
Physiology	...	28.03	26.96	21.84	15.76	9.94
Botany	...	...	...	...	10.34	9.15
Civil government	...	...	21.09	17.85	15.99	8.81
Chemistry	9.62	9.31	8.00	7.04	7.13	7.63
Civics	...	...	...	...	...	7.20
Agriculture	...	...	...	...	4.55	6.92
General biology	...	...	...	...	...	6.61
Bookkeeping	...	...	...	...	...	3.29
Zoology	...	...	...	...	7.88	3.24
Spanish	...	...	...	...	.65	2.72
Trigonometry	...	3.25	2.42	2.19	2.18	1.74
Psychology	...	3.35	3.19	1.84	1.35	1.43
Industrial	...	...	...	...	...	1.12
Greek	4.32	4.73	3.95	2.18	1.31	.83
Geology	...	5.52	4.02	2.62	1.38	.59
Astronomy	...	5.27	3.43	1.71	.88	.45

Would a wise choice of studies in high school and colleges now include Latin and Greek? Is the study of the ancient classics still the best form of a liberal education, or is it totally unsuited to the educational needs of the twentieth century? Does the study of the dead languages give a superior form of mental training, one that is the best foundation and preparation for the study of the professions and the sciences? Is it indispensable to a thorough understanding and a fluent command of good English? Is it, indeed, our "birthright," as the Dean of the Graduate School at Princeton University puts it. Or is it, on the other hand, a dull and dismal grind that tends to unfit a person for a successful or useful career, a process of "Wearing away the energies of youth in mental gymnastics" as Prof. Edward A. Ross of the University of Wisconsin characterizes classical education, a study from which "The average American high school boy gets less than out of any other study in the cur-

riculum" as David Starr Jordan, President of Leland Stanford Junior University wrote of Latin a few years ago?

It is an old, old controversy, so old that Rev. Sydney Smith said in the Edinburgh Review one hundred eleven years ago (October 1809) in a review of Edgeworth's Professional Education, after he had agreed with the author that the main fault in the then existing system of education was "Too much Latin and Greek," that "We are well aware that nothing very new can remain to be said upon a topic so often debated." The wisdom of studying the dead languages has always been more or less of an open question. Only slowly and reluctantly was the system introduced, and practically ever since it has been subject to periodical attacks of more or less severe criticism. It was two hundred years ago (Feb. 8, 1720), that Peter Burman on quitting the rectorship of the University of Leyden, delivered his famous "Oratio in humanitatis studia," the English title of which is "Oration against the studies of humanity, showing that the learned languages, History, Eloquence and Critik are not only useless, but also dangerous to the study of law, physick, philosophy and above all, of divinity, to which last poetry is a special help." Benjamin Franklin is named as another of the early opponents of the classical system. In 1866 Herbert Spencer published his great work on education with its vigorous attack upon the classical system and its recommendation of science as the proper basis of education. At the commencement exercises of Harvard University in 1883 Charles Francis Adams, Jr., delivered his famous Phi Beta Kappa oration entitled, "A College Fetich," in which he said that he had been handicapped in his life work by his classical education at Harvard, that in requiring its students to devote so much time to Latin and Greek the college stood in the position of a parent whose child asked for bread and was given a stone. In 1912 the United States Commissioner of Education said in his annual report, "The current educational criticism considers Latin as distinctly unnecessary in a people's school." Charles W. Eliot, one of America's greatest educators, Abraham Flexner, H. G. Wells, President G. Stanley Hall, and Thomas H. Huxley are among the others who consider both Greek and Latin as non-essentials.

These are only a few of the hundreds who have sharply criticised the classical system, and every criticism has brought forth brilliant and able replies from such men as John Stuart

Mill, James Russell Lowell, James Bryce, William E. Gladstone, Mathew Arnold, and hundreds of those who are or have been engaged in teaching the classics, among the most prominent of whom may be mentioned Andrew F. West, Paul Shorey, Francis W. Kelsey, Frances E. Sabin, Josiah B. Game, R. W. Livingstone, Gilbert Murray, W. H. D. Rouse, and H. C. Nutting.

For generations and centuries the controversy has continued. Although the classics have slowly but surely lost ground during the past half century, nevertheless there is still "much that may be said on both sides."

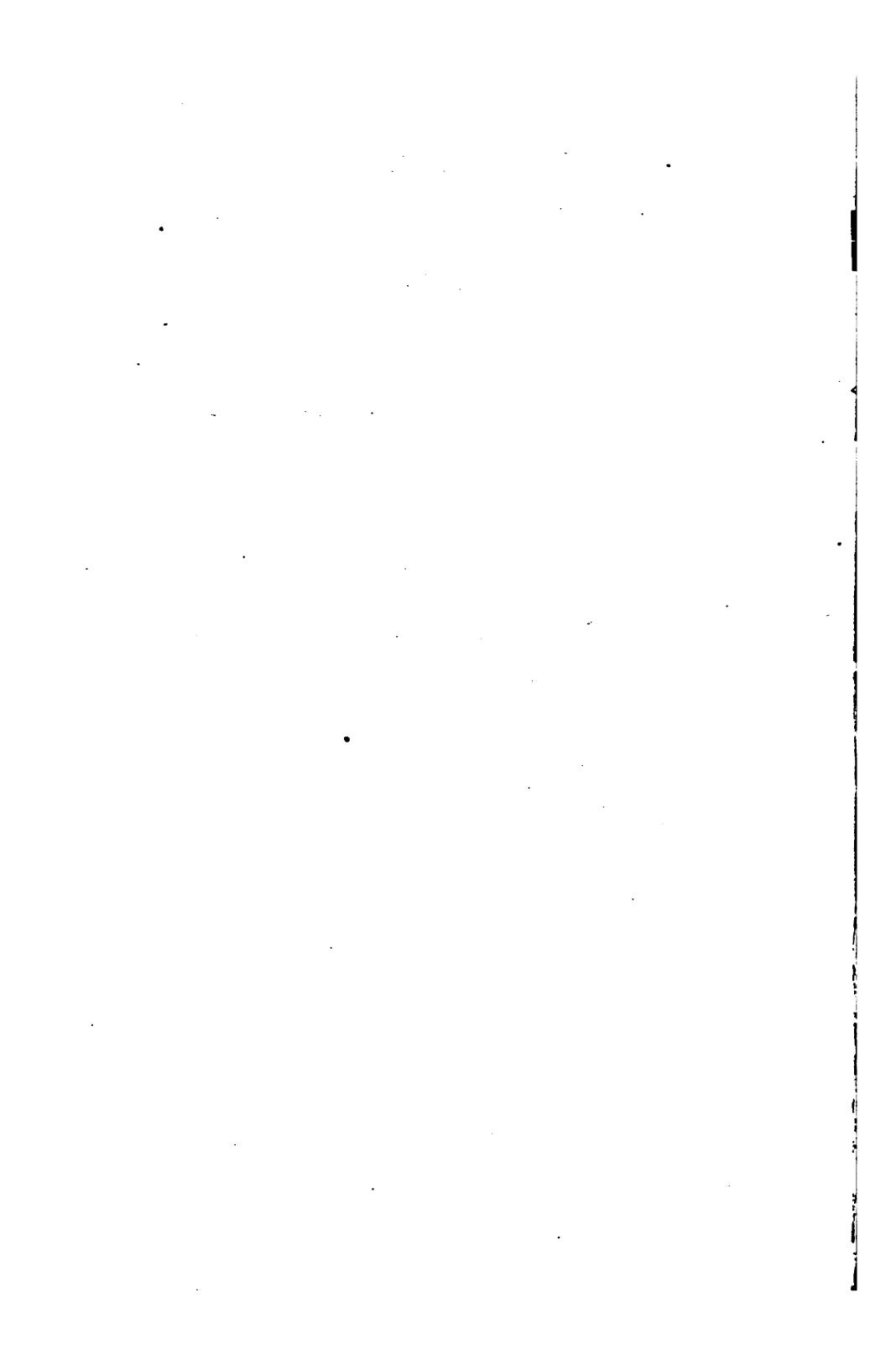
In few subjects for debate is it so important to make sure of the force and validity of the arguments, as it is in any debate on the value of the study of the dead languages. It seems unnecessary to say that a mere assertion without proof does not make an argument, and yet the literature of this question abounds with such assertions. That Latin or Greek or both are necessary or at least very helpful to an understanding or a command of good English is a claim that has often been made and often denied, but very seldom has there been even an attempt to prove the proposition. Witness the following from Dean West's "The Value of the Classics." (p. 29) "But for the mass of English speaking men, rare spirits excepted, the best use of English is not attained without knowing the sources whence our mother tongue draws its life. Nearly half of it is Latin. The better we know Latin, then, the better our use of English." No proof is given or even attempted. Again, an editorial in the Cleveland Plain Dealer for June 6, 1917 says, "It is as clear as day that the most exhaustive study of English must be deficient if it is not based on some knowledge of Latin and Greek." So clear that it is unnecessary to give even a suggestion of proof! However, a conscientious judge in a debate will give little credit to a debater who does not prove such an assertion.

Another precaution for the debater is in regard to the use of opinion evidence. The opinion of even an eminent man cannot be considered as making the basis of a valid argument unless it can be shown that he is an expert in the subject under discussion, and even then opinion evidence must be considered as one of the weakest forms of argument. Opinions for or against any proposition are always easy to obtain, the same as letters of recommendation or signatures to a referendum petition. Opinions

when used in a debate certainly cannot be considered as having the same weight as conclusions reasoned out and proved.

The whole controversy over the value of the study of the dead languages will in actual debate often turn on the question of the purpose of education. Does higher education exist for the purpose of creating a well developed personality, one capable of enjoying the beautiful in art, architecture, and literature, or is its purpose rather to prepare each individual to fill a useful place in his community and enable him to render the greatest service to society? In any debate on this question there might well be an interpretation, acceptable to both sides, which would define education and the purpose of education.

LAMAR T. BEMAN.



GENERAL DISCUSSION

CLASSICAL STUDIES¹

Since the revival of learning the place of honor in the educational systems of Europe has been occupied by the study of the classics. During the period of scholasticism (until the end of the fifteenth century) interest in Greek and Latin literature had been decaying; the impulse given by Charlemagne in founding schools for the study of Latin and also of Greek died out, and Latin was cultivated for practical purposes only, and as a matter of necessity; for Latin was the only universal medium of communication, and was the language of the church and the law. The Renaissance—that great reaction against mediævalism—resulted in the first place in a revived study of Greek and Latin; the Classics were studied in the spirit of Schiller's poem *Die Götter Griechenlands*, as embodying the wisdom and beauty of a lost order of things, as a voice from a higher world. For the practical study of Latin was substituted the study of Greek and Latin literature. At the present day (1906) the classics may be said to be engaged in the struggle for existence. Both in England and abroad there is a strong party claiming as a right the abolition of the classics, or at any rate their relegation to a subordinate position.

The main contention of the supporters of a modern education is that so many other subjects of modern growth demand recognition in a scheme of education, that time cannot be spared for the long discipline of Greek and Latin, that time devoted to the classics would be sufficient to embrace a complete cycle of the physical sciences. Modern languages are a discipline in language, and might, from that point of view, make good in part, if not entirely, the loss of the classics, while their practical utility cannot be left out of sight by a commercial nation like ourselves. The study of English literature would, it is maintained by Prof. Huxley, be a far better school of literary taste and culture than that of the writers of Greece and Rome; "The ascent of Par-

¹ Sonnenschein's *Cyclopedia of Education*. p. 59-61.

nassus is too steep to permit of our enjoying the view", and few reach the top. What there is of good in the classics could be better studied, from the aesthetic point of view, in translations. "I should just as soon think of swimming across the Hudson in a coat of mail when I can take a penny steamer," cries Emerson, "as of studying the classics in the original when I can read them in the admirable translations of Mr. Bohn." "The classics," says Prof. Huxley, "are as little suited to be the staple of a liberal education as palaeontology." The great aim of education, he holds, is to impart a knowledge of the universe as governed by law. Nature he compares to a beneficent angel playing a game of chess with man, in which defeat means death. Science is a knowledge of the laws of the game. Thus the demand is for what has been called an "Autochthonous" education—an education rooted in modern life and modern needs. That such an education is a possibility is proved by the example of Greece, herself. From the point of view of training, Mr. Herbert Spencer and Mr. Ruskin maintain that "The science which it is the highest power to possess, it is also the best exercise to acquire," in fact, that there is a sort of pre-established harmony between utility and educative value.

On the other hand, the classics are not without powerful champions. John Stuart Mill, not himself a blind worshiper of "authority," held most strongly that nothing could replace Latin and Greek as educational instruments. He defended them mainly on the score of formal training. "The distinctions between the various parts of speech are distinctions in thought, not merely in words. The structure of every sentence is a lesson in logic. The languages which teach the laws of universal grammar best are those which have the most definite rules, and which provide distinct forms for the greatest number of distinctions in thought. In these qualities the classical languages have an incomparable superiority over every modern language"; it might be added over Hebrew and Sanskrit. Again, in perfection of literary form the ancients are pre-eminent; the "idea" has thoroughly penetrated the form and created it. Every word is in its right place—every sentence a work of art. Modern literature lacks the simplicity and directness of the ancient classics. What they would have expressed in a single sentence, a modern writer will throw into three or four different forms, presenting it under different lights. In fact, Mill claims for classical liter-

ature what Hegel claimed for classical art, that the form and the matter are adequate one to the other. But even though the stage of literary enjoyment be not reached, there are many who hold that the training involved in a mastery of the elements of Latin is invaluable. Modern languages are too like our own to give the degree of emancipation from the thraldom of words which comes from comparing classic with English modes of expression. To translate "I should have spoken" into *dixisse* is more of a lesson in thought than to translate it into *Ich würde gesprochen haben*, or *J'aurais dit* because the form is more different. Still greater stress is laid upon the educational value of the higher kinds of composition. The recasting of the thought, the exercise of the *vis divinor* involved in clothing an idea in Greek or Latin, has been called the microcosm of a liberal education. (A. Sidgwick) Perhaps the strongest testimony of modern times to the value of a classical education is the Berlin memorial of 1880, addressed to the Prussian Minister of Education, on the question of admission of *Realschuler* to the universities. This memorial represents the unanimous views of the members of the faculty of philosophy (i.e. arts and sciences) and was signed by Hoffman, Helmholtz, Peters, Zupitza, etc. as well as by the classical professors. The memorial insists upon the value of classical philology in cultivating the ideality of the scientific sense, the interest in science not dependent on nor limited by practical aims, but as ministering to the liberal education of the mind and the many sided exercise of the thinking faculty.

To hold the scales between views so strongly held and so ably maintained is a difficult task, but must be attempted here. In the first place, it may be well to dispose of certain fallacies which rest upon popular prejudice rather than upon any basis of reason or experience. 1. That the classics train only the memory, not thought or observation. It may fairly be replied that though memory is involved, it is not necessarily involved more than in any other discipline. The learning of grammar by rote is falling out of favor; the dictionary meanings of words are learned not by a conscious exercise of the portative memory, but in the same way as the names of flowers or animals in studying natural history. The syntactical structure of Latin and Greek is more logical in its character than anything in the discipline of physical sciences. Observation—not, of course, sense-observation—is constantly exercised in translation and composi-

tion. Nor is it practically found that classical scholars are less capable, as thinkers, than physicists. 2. That classics foster a blind adherence to authority. But no one nowadays holds that the classic writers are all equally worthy of admiration, or claims any special consideration for the opinions which they express. Grammar is not the arbitrary creation of schoolmasters, but the record of law discovered by patient observation, and liable to revision by any competent inquirer. Mill held precisely the opposite opinion as to the effects of classical study. 3. That there is something grotesque and mediæval in classical studies. It has been shown above that so far from being mediaeval, the classics have established their position in our schools and universities by a revolt against mediævalism. 4. That the methods of teaching the classics cannot be further improved. So far is this from being true, that the scientific problem of constituting the rules of grammar is still only in the process of solution, and the existence of the didactic problem of determining what and how much should be taught at each stage has only begun to be realized in its full import.

On the other hand, the champions of physical science do not always have fair play. It is popularly supposed that "science" consists in accumulation of information such as that when a candle burns water and carbonic acid are produced, and that the good of physical science may be got by studying its results in books. This is to misunderstand and underrate the discipline of the laboratory. The value of training in the physical sciences is not to be measured by the possession of so many useful facts about gases, plants, and animals. If richly pursued, it involves not only a power of sense-observation, without which a man must be considered as so far maimed and defective, but also a habit of mind and attitude towards the universe, which have a very direct bearing upon both the criticism and the conduct of life. The man or woman who has physiological knowledge will be so far in a better position to make a study of health, and to bring up children wisely; will be less likely to ignore "the laws of the game," to believe in the domination of chance, and to make rash experiments in amateur medicine. For to be scientific is to know one's limitations, and this is a power.

The practical question is, to what extent can we afford to make education as complete as possible, and, supposing that something has to be sacrificed, what is it best to sacrifice? That

the literary side of education cannot be even relatively complete without classics may be taken as demonstrated. Our study of Greek and Latin is not so much the study of a foreign culture as the study of our own past; so intimately is modern culture connected, through the Renaissance, with Greece and Rome. We stand to the classics in a different relation from that in which they stood to anterior civilizations. Greek culture was, generally speaking, autochthonous; modern culture is not. And the man who has no Latin or Greek finds himself unable to prosecute his literary studies far, or to be a master even in the literature of his own country. Still the question remains, can we afford to purchase this completeness at the price which it costs—a less complete development in the direction of modern studies? The answer to it must depend upon the aim which people set before themselves in life—upon utility in its broad sense—and upon the length of the school course. For those whose tastes are literary or artistic, classics may be the most useful of studies; for those who have to contemplate an early entrance into practical pursuits, they may well be a luxury of too high a cost. At the present day the classics retain a firm hold of our higher English schools, and Latin, at any rate, is becoming recognized as an important item in the education of girls.

MEDIAEVAL SCIENTIFIC UNIVERSITIES ¹

We are prone to think of the old-time universities as classical or literary schools with certain limited post-graduate features, more or less distantly smacking of science. The reason for this is easy to understand. It is because out of such classical and literary colleges our present universities, with their devotion to science, were developed or transformed during the last generation or two. It is to be utterly ignorant of mediæval education, however, to think that the classical and literary schools are types of university work in the Middle Ages. The original universities of the thirteenth and fourteenth centuries paid no attention to language at all except inasmuch as Latin, the universal language, was studied in order that there might be a common ground of understanding. Latin was not studied at all, however, from its literary side; to style as such the professors in the old mediæval

¹ Walsh, James J. *Education, How Old the New.* p. 103-8.

universities and the writers of the books of the time paid no attention. Indeed it was because of this neglect of style in literature and of the niceties of classical Latin that the university men of recent centuries before our own, so bitterly condemned the old, mediæval teachers and were so utterly unsympathetic with their teaching and methods. We, however, have come once more into a time when style means little, indeed, entirely too little, and when the matter is supposed to be everything, and we should have more sympathy with our older forefathers in education who were in the same boat. We have inherited traditions of misunderstanding in this matter, but we should know the reasons for them and then they will disappear.

As a matter of fact, exactly the same thing happened in our modern change of university interests during the latter half of the nineteenth century as happened in the latter half of the fifteenth century in Italy, and in the next century throughout Europe. With the fall of Constantinople the Greeks were sent packing by the Turks and they carried with them into Italy manuscripts of the old Greek authors, examples of old Greek art and the classic spirit of devotion to literature as such. A new educational movement termed the study of the humanities had been making some way in Italy during the preceding half-century before the fall of Constantinople, but now interest in it came with a rush. The clergymen, the nobility, even the women of the time became interested in the New Learning, as it was called. Private schools of various kinds were opened for the study of it, and everybody considered that it was the one thing that people who wanted to keep up to date, smart people, for they have always been with us, should not fail to be familiar with. The humanities became the fashion, just as science became the fashion in the nineteenth century. Fashion has a wonderfully pervasive power and it runs in cycles in intellectual matters as well as in clothes.

The devotees of the New Learning demanded a place for it in the universities. University faculties perfectly confident, as university faculties always are, that what they had in the curriculum was quite good enough, and conservative enough to think that what had been good enough for their forefathers was surely good enough also for this generation, refused to admit the new studies. For a considerable period, therefore, the humanities had

to be pursued in institutions apart from the universities. Indeed it was not until the Jesuits showed how valuable classical studies might be made for developmental purposes and true education that they were admitted into the universities.

Note the similarity with certain events in our own time in all this. Two generations ago the universities refused to admit science. They were training men in their undergraduate departments by means of classical literature. They argued exactly as did the old mediæval universities with regard to the new learning, that they had no place for science. Science had to be learned, then, in separate institutions for a time. The scientific educational movement made its way, however, until finally it was admitted into the university curricula. Now we are in the midst of an educational period when the classics are losing in favor so rapidly that it seems as though it would not be long before they would be entirely replaced by the sciences, except, in so far as those are concerned who are looking for education in literature and the classic languages for special purposes.

It will be interesting, then, to trace the story of the old mediæval universities as far as the science in their curriculum was concerned, because it represents much more closely than we might have imagined, or than is ordinarily thought, the preceding phase of education to the classical period which we have seen go out of fashion to so great an extent in the last two generations. We shall readily find that at least as much time was devoted in the mediæval universities to the physical sciences as in our own, and that the culture sciences filled up the rest of the curriculum. Philosophy, which occupied so prominent a place in older university life, was not only a culture science, but physical science as well, as indeed the name natural philosophy, which remained almost down to our day, attests.

Physical science was not the sole object of these mediæval institutions of learning, but they were thoroughly scientific. The main object of the universities in the olden time was to secure such discussion of the problems of man's relation to the universe, to his Creator, to his fellow-creatures and to the material world as would enable him to appreciate his rights and duties and to use his powers. Huxley declared that the trivium and quadrivium, the seven liberal arts studied in the mediæval universities, probably demonstrate a clearer and more generous comprehen-

sion of what is meant by culture than the curriculum of any modern university. Language was learned through grammar, the science of language. Reasoning was learned through logic, the science of reasoning; the art of expression through rhetoric, a combination of art and science with applications to practical life. Mathematics was studied with a zeal and a success that only those who know the history of mediæval mathematics can at all appreciate. Cantor, the German historian of mathematics, in hundreds of pages of a large volume, has told the story of the development of mathematics during the centuries before the Renaissance, that is from the thirteenth to the fifteenth, in a way that makes it very clear that the teaching at the universities in this subject was not dry and sterile, but eminently productive, successful in research, and with constant additions to knowledge such as live universities ought to make.

Then there was astronomy, metaphysics, theology, music, law and medicine. The science of law was developed and, above all, great collections of laws made for purposes of scientific study. Of astronomy every one was expected to know much, of medicine we shall have considerable to say hereafter, but in the meantime it is well to recall that these mediæval centuries maintained a high standard of medical education and brought some wonderful developments in the sciences allied to medicine and above all in their applications to therapeutics. Surgery never reached so high a plane of achievement down to our own time, as during the period when it was studied so faithfully and developed so marvellously at the mediæval universities. It was inasmuch as a knowledge of physics was needed for the development of metaphysics that the mediæval schoolmen devoted themselves to the study of nature. They turned with as much ardor and devotion as did Herbert Spencer in the nineteenth century, to the accumulation of such information with regard to nature as would enable them to draw conclusions, establish general principles and lay firm foundations for reasonings with regard to the creature and the Creator. It is, above all, this phase of mediæval teaching work, of the schoolmen's ardent interest that is misunderstood, often ignored and only too frequently misrepresented in the modern time.

REQUIREMENTS FOR THE BACHELOR'S DEGREE¹(a) *College Entrance Requirements*

COLONIAL PERIOD

Latin and Greek.—The history of college entrance requirements in the United States begins in 1642, when Harvard College published the following announcement:

When any scholar is able to read Tully or such like classical Latin Author extempore, and make and speak true Latin in verse and prose (suo ut aucto Marte), without any assistance whatever and decline perfectly the paradigms of nouns and verbs in ye Greek tongue, then may hee bee admitted into ye College, nor shall any claim admission before such qualifications.

The foregoing is a translation from the Latin of a part of the college statutes.

In the College of William and Mary, Latin and Greek were the only subjects required for entrance at the beginning of its career in 1693, although no definite statement of the requirements is given.

As early as 1720, Yale College made the following announcement:

Such as are admitted Students into ye Collegiate School shall in their examination in order thereunto be found expert in both ye Latine and Greek grammars, as also skilful in construing and grammatically resolving both Latine and Greek authors and in making good and true latin.

As time progressed some difficulty was found at Harvard in keeping up that part of the requirement which obliged the candidates to speak Latin. In 1734 this obstacle was removed, and in 1790 the word "translate" was substituted for the word "construe." Yale followed suit in 1795.

Arithmetic.—In 1745, Yale College added common arithmetic to the entrance requirements. At the same time the moral character of the candidates was not overlooked, as is shown by the following: "And shall bring sufficient testimony of his blameless and inoffensive life."

Princeton, in 1746, based the entrance standards on the same grounds as those of Harvard and Yale, but did not include arithmetic until 1760. This subject, however, seems to have dropped

¹ Walton C. John. Requirements for the Bachelor's Degree. (Chap. 1.)

out until 1813 when the student was supposed to know the subject as far as the rule of three.

Columbia College, which began as King's College in 1754, prescribed Latin, Greek, and arithmetic for entrance. Both Brown and Williams had essentially the same requirements.

Entrance examinations (oral).—During the colonial period most students prepared for college at the Latin-grammar schools which were closely related to the colleges. The examinations were oral and not so strict as might have been expected.

THE NINETEENTH CENTURY

Geography.—In 1807, geography and arithmetic were added to the usual requirements at Harvard College, and there is evidence of greater care in stating the terms of admission. The amount of work in each subject was more clearly indicated. Neither was quality overlooked when we find within small compass such expressions as these: "Thoroughly acquainted with the grammar of the Greek;" "properly construe and parse," etc.; "be well instructed in the following rules of arithmetic;" "have well studied a compendium of geography." Geography found a place as an entrance requirement before 1830 in Princeton, Columbia, Yale, and other colleges.

English grammar.—The next preparatory subject introduced was English grammar. Princeton led out with this subject in 1819, being followed by Yale in 1822, Columbia in 1860, and by Harvard in 1866.

Algebra and geometry.—Harvard was the first college to extend the entrance requirement in mathematics beyond arithmetic. In 1820 elementary algebra was added as far as geometrical progressions. Algebra was prescribed for entrance by Columbia in 1821, by Yale in 1847, and by Princeton in 1848. In 1844 Harvard added geometry and additional topics in algebra. Between 1856 and 1870 geometry was added to the entrance requirements by Yale, Princeton, Michigan, and Columbia.

History; physical geography.—History was required for entrance by Harvard and Michigan in 1847; by Cornell in 1868. Physical geography was found in the requirements for Harvard and Michigan in 1870.

THE MODERN PERIOD

Modern languages.—Harvard College was the first to make French an entrance requirement for the regular college course, although in the early part of the nineteenth century Columbia College had recognized this language as a prerequisite to its courses in science. By 1875, both French and German had equal recognition as entrance subjects at Harvard. Yale added French in 1885, Columbia in 1891, Princeton in 1893, and Cornell in 1897.

English composition and rhetoric.—English composition was included in the entrance requirements of Princeton in 1870. The colleges next to add this subject were Harvard in 1874, Michigan in 1878, Columbia and Cornell in 1882, and Yale in 1894. Rhetoric had been required by the University of Michigan from 1874 to 1878, while Princeton added the latter subject in 1884.

Sciences.—Although Harvard and Michigan had already introduced physical geography in 1870, Syracuse University was the first to prescribe natural philosophy. Natural science was added to the requirements by Harvard in 1876, Cornell followed with physiology in 1877, and Michigan included natural science and botany in 1890.

It is apparent that the order of importance of prescribed entrance subjects has been completely reversed in recent years. Until a few years ago Latin and Greek had always occupied first place, but since 1885 English has gained the ascendancy. Starting out with simple grammar the subject has been developed so as to include composition, rhetoric, and a broad range of study in the best of both English and American literatures. Latin and Greek still have a place in college entrance requirements, but they are seldom required unless it be in combination with modern languages. The present tendency is to consider all languages under one general group; the privilege is then given to the student to make suitable electives in harmony with the specific purpose of the college course.

Mathematics is the only entrance subject that in the long run of years has maintained its place. Next to English it appears most frequently on the list of prescribed subjects.

Science and history are well established, although they are considered as electives by nearly one-half of the institutions of our list.

The most recent development is the growing recognition of a large group of vocational subjects which command within certain limits equal credit with the literary subjects.

(b) College Graduation Requirements

COLONIAL PERIOD

The establishment of Harvard College on the banks of the Charles in 1636 is the outstanding event in the history of higher education in the United States. As the mother of American colleges and universities, Harvard College has been inseparably connected with the developments of collegiate education that have taken place during the past three centuries. Compared with the present standards of graduation the following requirements, taken from the laws of Dunster (1642), seem very simple indeed:

Every scholar that on proof is found able to translate the original of the Old and New Testament into the Latin tongue, and to resolve them logically, and shall be imbued with the beginnings of natural and moral philosophy, withal being of honest life and conversation, and at any public act hath the approbation of the overseers and master of the college, may be invested with his first degree; but no one will expect this degree unless he shall have passed four years in college and has maintained therein a blameless life and has sedulously observed all public exercises.

The first year shall teach rhetoric, second and third year dialectics, and the fourth year shall add philosophy * * * In this course of four years each one shall dispute twice in his public schools and shall respond twice in his own class; which if he performs, and is found worthy after the regular examination, he shall become an A.B.

William and Mary College was founded in 1693, at Williamsburg, Va., by James Blair, who modeled the curriculum somewhat on the plan of the University of Edinburgh. The principal subjects of study were the classics, Hebrew, philosophy, arithmetic, geography, and anatomy. Yale was established at New Haven, Conn., in 1701. The subjects prescribed for the A. B. degree at that institution were the classics including Tully and Vergil, also logic, physics, Greek, New Testament, and Hebrew. Disputations were held two or three times a week.

Princeton College received its charter in 1746 and closely followed the programs of Harvard and Yale. The University of Pennsylvania was a direct offshoot from the College, Academy, and Charitable School of Philadelphia. Franklin was the father of this school and he bore testimony in his early day to the uselessness of Latin and Greek in the educational requirements of the schools. To him foreign languages were but the tools of knowledge, and if the vernacular gave all necessary information, other tools were needless. The course of study at the Phila-

delphia school was unusually strong in science, and contrary to the desires of the founder, it was equally strong in the classics.

Columbia University, founded as King's College in 1754, enlarged the college curriculum and laid the foundation for a very broad course of study. The following summary of college requirements announced by the president in the year 1754 is of special interest:

The college aims to instruct and perfect—
In the learned languages;
In the art of reasoning correctly;
In writing correctly and speaking eloquently;
In the arts of numbering and measuring;
In surveying and navigation;
In geography and history;
In husbandry, commerce, and government;
In knowledge of all nature in the heavens above us and in the air, water, and earth around us and the various kinds of meteors, stones, mines, and minerals, plants, and animals;
In everything useful for the comfort, the convenience, and elegance of life in the chief manufactures.
To lead them [pupils] from the study of nature to the knowledge of themselves and of the God of nature, and their duty to Him, themselves, and one another;
And everything that can contribute to their true happiness, both here and hereafter.

THE REVOLUTIONARY PERIOD, AND FRENCH INFLUENCES (1780 to 1840)

About the time of the Revolutionary War when the influences which gave birth to the Nation were at their height in this country, several important State-supported colleges were founded. These reflected to a considerable extent the French practices of organization, especially in the States of New York, Georgia, Michigan, Wisconsin, Louisiana, California, and Maryland.

The colleges were, in most instances, the centers of the several State systems of education. To a certain extent the elective system, as we now understand it, was attributed to French influences. Jefferson in reorganizing education in Virginia showed the result of his contact with the newer ideas which have made a lasting impression on higher education in this country. The curriculum of the University of Virginia, as adopted in 1824, is, doubtless, next to the founding of Harvard College, the most significant event in the history of American college education.

George Ticknor, who was called to the chair of languages at Harvard College in 1817, urged radical changes in the administration of the curriculum on accepting his post, and he sponsored not only the elective system but urged the organization of departments with separate heads.

About the middle of the nineteenth century President Way-

SELECTED ARTICLES

land, of Brown University, was successful in broadening the scope of the college curriculum. He stood also for a better quality of instruction. Meanwhile the sciences, chemistry in particular, were finding a permanent place in college requirements, having appeared first at Yale and Harvard shortly after the year 1800. Mathematics was being developed under the influence of the great French mathematicians. Political economy was first taught at Harvard in 1820, and Yale, Columbia, Dartmouth, Princeton, and Williams all added this subject within 15 years. The first chair of history was founded by William and Mary in 1822 and Harvard followed suit in 1839.

While French had been a side issue in some of the colleges, Bowdoin established a chair of modern languages, under H. W. Longfellow, in 1825. In the same year German was added to the course at Harvard. It was also taught at the University of Virginia.

THE CIVIL WAR

The Civil War gave a setback to several of the old State institutions which had arisen under the national movement. But at the same time a very important movement in higher education was launched by Senator Morrill, of Vermont, who was father of the principal enabling acts of the land-grant colleges. These colleges were not only to give a liberal education in the arts and sciences, but were especially devoted to developing agricultural and engineering education of a high order. The States were not slow in complying with the conditions of the Morrill and subsequent acts, so to-day we find 68 land-grant colleges in successful operation all over the United States.

GERMAN INFLUENCE

The influence of the German universities on a small group of prominent American thinkers and educators before the outbreak of the Civil War led to the further development of the principle of freedom of election of college studies. President Eliot, of Harvard, in the year 1869, led out in this movement which has with little resistance spread over the United States. Some reaction to extreme views on this question has been manifest, the present tendency being to safeguard the student's work by a more restricted plan of election which will insure the most profitable combination of studies.

BRIEF EXCERPTS

The conflict of science and Classics is a dead issue. Science has won an overwhelming victory, *Paul Shorey, Atlantic Monthly* 120:97 July 1917.

If there be one thing more certain than another, it is that Latin and Greek no longer hold the place as educational agencies which they occupied one hundred or, indeed, even fifty years ago. *Sidney G. Ashmore, Professor of Latin, Union College, The Classics and Modern Training*, p. 1.

Fifty per cent of the crime today can be traced to the public school system and the manner in which it turns the children out into the world, without a vocation and without the necessary training to fit them for the work that they are to do. *Mayor Darius A. Brown, of Kansas City, Buffalo Courier Sept. 11, 1920.*

The classics a few generations ago, held indisputably the commanding position among all other subjects of the school and college curriculum. Mathematics and philosophy shared with the ancient tongues almost the entire time of the student. The recent development, however, of the natural and physical sciences, the rise of good modern literature and the commercial spirit of the age have retired Greek and Latin to a place coordinate with or subordinate to the modern subjects, and have even forced them to defend their right to remain. No longer is there any necessity for one or two studies to sway the curriculum, and even the friends of the ancient languages do not desire to have them restored to their former dominion. *Edward P. Davis, Education* 32:52 Sept. 1911.

By the head of the Department of Latin in Adelbert College is given this statement, "All interest in matters classical and all belief in their value have ceased to exist in the community and the same condition obtains in college. About twenty per cent of the freshmen take Latin during their first year, not because they wish to do so, but because it seems easier than anything else under the present arrangements. Two or three or four students continue a year longer,—practically nobody after sophomore

SELECTED ARTICLES

year. There is therefore no incentive for advanced work in this institution in classics, for Greek is worse off than Latin, and it is of course foolish for anyone to study Latin without Greek and quite impossible to carry on the work in the former without the latter." *Annual Report of the President of Adelbert College and Western Reserve University, Western Reserve Bulletin 18:48, Sept. 1915.*

..... meaning in Moreau's *Wasen*. And for further bibliography of books and papers referred to in this address cf. *infra*, p. 591, 587, 599.

⁸ Huxley (*Science and Education*, 83) stretched "nature" to include "men and their ways," and Arnold with more justice made "letters" include Copernicus and Darwin (their results, not their processes).

abuse of exaggeration and irrelevancy.¹ Our opponents have grown very shy of the kind of logic which delivered them into our hands, though they still grotesquely misconceive the nature and aims of our teaching.² But only a few incorrigibles still harp on the false antithesis of words and things.³ The recollection of Lowell's eloquent protest (VI, 174) if nothing else would make them eschew the precious argument of Herbert Spencer and Lowe that Greece was such a little country, "no bigger than an English county." Some of them are beginning to apprehend the distinction between education and instruction, formation and information.⁴ And if any of them still believe that the intrinsic excellence of classical literature is a superstition of pedants they rarely venture to say so in public in the fearless old fashion of the *Popular Science Monthly*.⁵ We have won a victory at the bar of educated opinion in which we may feel some complacency, though we must beware of overestimating its practical significance. The man in the street has not changed his opinion of dead languages, and the great drift of American education and life toward absorption in the fascinating spectacle of the present has not been, perhaps cannot be, checked. A stream of tendency cannot be dammed by argument. As Professor James says:

¹ Huxley, *op. cit.*, 163; Jebb, *op. cit.*, 537. No rational advocate would now recommend either Latin or botany on the ground that it *exercises the memory*. See Gildersleeve, *op. cit.*, 28.

² Cf. President David Starr Jordan, *Pop. Sci. Mo.*, 73 (1908), p. 28: "Once the student cuts entirely loose from real objects and spends his days among diacritical marks, irregular conjugations, and distinctions without difference his orientation is lost." So Tyndall once demanded "a culture which shall embrace something more than declensions and conjugations." What would President Jordan think of a classicist who characterized the study of science as cutting loose from human interests and counting fish-scales? See Zieliński's rebuke of Father Petroff, p. 200-1; Lowe, "Speech at Edinburgh," November 1, 1867: "We find a statement in Thucydides or Cornelius Nepos who wrote 500 years after and we never are instructed that the statement of the latter is not quite as good as the former. . . . The study of the dead languages *precludes the inquiring habit of mind which measures probabilities*" [sic]. Cf. *infra*, p. 594-97.

³ Lowe at Edinburgh, November, 1867; Spencer, *passim*; Jordan, *Pop. Sci. Mo.*, 73 (1908), p. 29; cf. Youmans, 5, "The relation between words. . . . and ideas . . . is accidental and arbitrary." Cf. *contra* Masson *apud* Taylor, p. 306; Mill, 347-8.

⁴ Gildersleeve, *Essays and Studies*, 13: Zieliński, 28; Brunetiére, *Questions Actuelles*, 51 ff., 62, 74-75, 404-5.

⁵ 23, 701: "The Dead Language Superstition," a diatribe called forth by Mill's "Inaugural." See in like strain Mach, *Open Court*, November 22, 1894; Bierbower, "Passing of the Linguist," *N. E. Magazine*, n.s. 36, 246 ff.

"Round your obstacle flows the water and gets there all the same."¹ The majority still believe that modern civilization can find not only entertainment but also all the instruction and all the culture which it requires in the contemplation of moving pictures of itself whether in the five-cent theater or the ten-cent magazine or the one-cent newspaper. But among the thoughtful there is a reaction in our favor. They may not accept our estimates of the transcendental worth of the classic literatures or the unique discipline of classical studies. But they have lost forever the illusion that the mere suppression of Greek and Latin will bring in the educational millennium.² They are observing with mixed feelings a Greekless generation of graduates and wondering what a Latinless generation will be like. They admit with some natural reserves the breakdown of the elective system.³ They recognize that a real education must be based on a serious, consecutive, progressive study of something definite, teachable, and hard.⁴ And while they may not agree with us that no good substitutes for Greek and Latin and the exact sciences can be found, they are not quite so certain as they were that sociology, household administration, modern English fiction, short stories as a mode of thinking, and modern French and German comedies are "equally as good." Thirty or fifty years ago they could contrast with our ideal the actual results of that classical training for which we claimed so much.⁵ It is now our turn to challenge the results of the new system.⁶

Addressing myself to a generation thus chastened in spirit

¹ For an effective answer to this fatalistic *vox populi vox Dei* argument, see Zielinski, *Our Debt to Antiquity* (Eng. trans., E. P. Dutton), 3-8; cf. Lowell, "Harvard Anniversary Address," *Works*, VI, 162: "I have seen several spirits of the age in my time," etc. Paulsen (II, 370) says that in 1770 Kant would never have foreseen that in 1820 Greek would lead science in the schools. Yet he himself ventures the prediction that a third renaissance of classics will never come (p. 634-35).

² "Harking Back to the Classics," *Atlantic Mo.*, 101 (1908), 482; L. R. Briggs, "Some Old-Fashioned Doubts about New-fashioned Education," *Atlantic Mo.*, 86, 463; Williams, *School Review* (1909), 38-84. Gayley, *Idols of Education*; Barrett Wendell, *The Mystery of Education*; see Brunettère, *op. cit.*, 399-400.

³ Already Lowell, *op. cit.*, VI, 161; cf. Shorey, "Discipline in Education." Bookman, March, 1906. See the entire recent literature of dissatisfaction with the colleges.

⁴ Huxley, *op. cit.*, 414; cf. already the admirable words of De Morgan in Youmans, *The Culture Demanded by Modern Life*, 442.

⁵ See *Contemp. Review* xxxv, 833.

⁶ Paulsen in *Educat. Review*, xxxiii, 39, says (of classics) that we must consider what the average graduate gets, not ideals. Well, what has the average graduate been getting from the "bargain-counter, sample room, à la carte" system of the past two decades?

SELECTED ARTICLES

and exercised in the dialectics of educational controversy, I need not do more than enumerate some of the hoary fallacies and irrelevancies which it was once necessary to refute in detail. I may take it for granted that we must compare either ideals with ideals or actualities with actualities; that from the standpoint of the ideal all subjects are badly taught, imperfectly learned, and quickly forgotten;¹ that the classics are on the whole among the better-taught subjects,² and that middle-aged business men who complain that they cannot read Greek and Latin for pleasure would not distinguish themselves if examined on mediæval history, conic sections, old French, organic chemistry, or whatever else they happened to elect in college. As George Eliot says, "the depth of middle-aged gentlemen's ignorance will never be known for want of public examinations in this branch." It is known in the case of the classics only because they regret that they have lost them and so betray themselves.

Similarly we may assume a general recognition of the distinction between the higher and the lower sense of "practical,"³ of the fact that the most practical of studies are useful only to those who are to use them,⁴ and of the repeated testimony of business and technical men that the actual knowledge gained in preparatory college courses in their subjects is of little value.⁵

Again everybody except President Stanley Hall is now aware

¹ Cf. Barrett Wendell, *The Mystery of Education*, 143. On the attempt to limit education to what all "educated" men remember cf. Zielinski, p. 27.

² Cf. *Andover Review*, V, No. 2 (1884), 83; Huxley, *op. cit.*, 153; Professor Alexander Smith, in *Science*, XXX, 457-66: "Every conclusion is tested and every element in problem-solving by the scientific method is covered. . . . The method is simple, yet of unquestionable efficiency. A method so simple and certain has not yet been devised for history, literature, political economy, or chemistry."

³ Cf. *Cambridge Essays* (1855), 291; W. F. Allen, *Memorial Volume*, 129, "Practical Education"; Forman, *op. cit.*, 7-9; Clapp, *Overland*, XXVIII, 94.

⁴ Huxley, *Science and Ed.*, 316-21, rejects histology, comparative anatomy, and *materia medica* as of no practical use to the physician. Cf. Bruneti  re, *op. cit.*, 401; Jacob Bigelow, "Remarks on Classical and Utilitarian Studies," 1867, with the answer in *No. Am. Rev.*, CIV, 610.

⁵ Loeb, *School Rev.* (1909), 373, "But thirteen years' experience in very active affairs taught me that the time spent at Harvard studying history of finance. . . . might as well have been devoted to the classics for all the practical value I got." "Ou sont aujourd'hui la physique, la chimie, la physiologie d'il y a trente ans seulement, et qu'en connaissons-nous pour les avoir   t  d  es au coll  ge, et depuis oubli  es?"—Bruneti  re, *op. cit.*, 94.

that the phrase "dead language" is not an argument but a question-begging epithet or a foolish, outworn, metaphor.¹

Lastly, the right use and limits of translations are no longer likely to be misunderstood. Few will now be misled either by Labouchère's statement that Bohn's translations had shown up the classics, or Emerson's saying that he would as soon swim when there was a bridge as resort to the original in place of a translation; or Professor Moulton's argument that translations are as good as the originals for the teacher of "general" literature. And though we sometimes meet the fallacy that posed Gibbon's aunt, the argument that the student's own version is inferior to the printed translations of great scholars which he might use instead, it is merely as Gibbon says "a silly sophism which could not easily be confuted by a person ignorant of any language but her own." There is no opposition between the use of translations and the study of the original. On the contrary even a little acquaintance with the original adds immensely to their usefulness. They are tools which are best employed by those who have some insight into the method of their construction.² For some purposes they may be almost as good as the originals. But among the purposes for which they are not so good are classroom discipline, the development of the critical intelligence and the habit of exactness, and the maintenance of high standards of national taste and culture in the educated classes.³

¹ Cf. Fouilliée, 125, on Raoul Frary's "Culture of Dead Wood." "A dead language is the dead sea of thought"—*Pop. Sci. Mo.*, xvii, 148. Cf. in Butler's *Brewhon*, the satire on "Colleges of Unreason given over to the study of the Hypothetical Language"; the elaboration of the same old jest in another form by Professor Scott, *Ed.*, XVI, 360, and Spencer's constant recourse to the argument.

For the retort crushing on the "dead languages" argument, cf. the eloquent words of D'Arcy W. Thompson in *Day Dreams of a Schoolmaster*; Lowell, *op. cit.*, VI, 165; "If their language is dead, yet the literature it enshrines is rammed with life as perhaps no other—ever was or will be."—Bryce, *School Rev.* (1909), 369; Postgate's Liverpool Inaugural Lecture on "Dead Language and Dead Languages," 1-10; *ibid.*, 12; 85 per cent of "Ido" is intelligible to an Englishman who knows—Latin. For the superior educational value of a synthetic, classic, or a "dead" language, cf. Jebb, *op. cit.*, 621; Gildersleeve, *op. cit.*, 27-28; Mill, *op. cit.*, 352-53; Zieliński, *op. cit.*, 33 ff.; Laurie, 10; *infra*, p. 508.

² Cf. President Mackenzie, *School Rev.* (1908), 378-80; Zieliński, *op. cit.*, 112.

³ Cf. Gildersleeve, *op. cit.*, 20, A. J. P., XXX, 353; Mill, *op. cit.*, 350; Clapp, *op. cit.*, 100; Zieliński, *op. cit.*, 85, 87; T. Herbert Warren, *Essays on Poets and Poetry*, III; Wilamowitz, *Introduction to "Hippolytus"*: *Was ist Uebersetzen?*; Paul Cauer, *Kunst des Uebersetzens*, 4th ed., 1900; Diels, *Herakleitos*: "Uebersetzen ist Spiel oder, wenn man will, Spielerel."

In addition to all this controversial and negative work, we may take for granted the conventional positive and constructive arguments for classical studies elaborated by a long line of able apologists, except so far as we have occasion to summarize or refer to them in the course of this review.¹

These arguments are not exclusive but cumulative. The case of the classics does not rest on any one of them and is not impaired by the exaggerated importance that mistaken zeal may attribute to any one. Those who still harp on the superiority of the classics as discipline² do not therefore "tacitly acknowledge themselves beaten on the point of their intrinsic value"³ and those who prefer to emphasize the "necessity of the ancient classics" for the understanding of modern life and letters⁴ may still believe that high-school Latin is the best instrument of discipline available in secondary education.⁵

The March number of the *Classical Journal* tabulates the aims of classical study as stated by teachers in response to a *questionnaire*. Thirty teachers aim at mental training, 29 at literary appreciation, 26 at power of expression, 26 at the relation of the ancients to us, 26 at ability to read, 15 at general linguistic training, 8 at grammar, 6 at acquaintance with Greek and Latin literature. Obviously there is nothing incompatible in these aims. It is a question of emphasis, the needs of the class, the ability, training, and tastes of the teacher. A faddist may ride his hobby to death, whether it be optatives, or lantern slides,

¹See *supra*, p. 585, n. 3; *infra*, p. 613-17. For some earlier apologies and discussions see Sandy, *History of Classical Scholarship*, II, 18, 51, 71, 125, 130, 151, 171, 181, 209, 256; also the writers quoted in Taylor, *Classical Study: Its Value Illustrated* (Andover, 1870). Cf. further W. G. C. in *Cambridge Essays* (1855), 282; *Essays on a Liberal Education* (1867); Arnold in *Higher Schools in Germany*, and *A French Eton*; Field, Lyttleton, and Rendall in *Essays on Education* by members of the XIII (London, 1891); Goodwin, *Educat. Rev.*, IX, 335; Postgate, "Are the Classics to Go?" *Fortnightly*, LXXXVIII, 866 ff.; West, "Must the Classics Go?" *N. A. Rev.*, CXXVIII, 151; Kelsey; "Position of Latin and Greek in American Education," *Educat. Rev.*, XXXIII, 162; Clapp, *Overland*, XXVIII, 93 ff.; T. Rice Holmes, "The Crusade Against the Classics," *National Rev.*, XLII, 97 ff.; Freeman in *Macmillan*, LXIII, 321 ff.; Andrew Lang in *Living Age*, CXLV, 765 ff.; J. C. Collins, *Fortnightly*, LXXXIII, 260 ff.; T. E. Page, *Educat. Rev.*, XXXIV, 144; Manatt, *N. Y. Evening Post*, August 18, 1906; Anatole France, "Pour le Latin," *Vie littéraire*, I, 281; Brunetière, "La question du Latin," *Revue des deux mondes*, Dec. 15, 1885.

² E.g., Professor Sidney G. Ashmore, *The Classics and Modern Training*, chap. i. See *supra*, 588, n. 11-12.

³ Gildersleeve, *op. cit.*, 15.

⁴ Gildersleeve, *South. Quart.*, XXVI, 145.

⁵ Cf. Bennett and Bristol, *The Teaching of Latin and Greek*, chap. i, and Bristol in *Educat. Rev.*, XXXVII, 243-51.

or parallel passages from the poets. But in return, the good teacher will almost in the same breath translate a great poetic sentence, bring out its relations to the whole of which it is a part, make its musical rhythm felt by appropriate declamation, explain a historical or an antiquarian allusion, call attention to a dialectic form, put a question about a peculiar use of the optative, compare the imagery with similar figures of speech in ancient and modern poetry, and use the whole as a text for a little discourse on the difference between the classical and the modern or romantic spirit; so that you shall not know whether he is teaching science or art, language or literature, grammar, rhetoric, psychology, or sociology, because he is really teaching the elements and indispensable prerequisites of all.

Similarly of the diverse considerations urged by former apologists and the contributors to these symposia. The case of the classics rests on no one taken singly but on their conjoint force, and it is not really weakened by the disproportionate stress sometimes laid on the weaker arguments. The illumination or scientific terminology, for example, is a minor and secondary utility of a little knowledge of Greek and Latin on which the biologist or physician is especially apt, perhaps over much, to insist. That is his contribution. He does not mean to rest the case on that. He is not answered by the argument that "ten or twelve years" of study is too big a price to pay for this result and that terminology can be learned from glossaries. For a very slight knowledge of the languages makes an immense difference in the intelligence with which the dictionary or the glossary of scientific terms is consulted and the vividness with which its statements are realized. One or two years will yield a good deal of that particular utility, and the question for the teacher of science or medicine is whether any other *non-professional* college study is likely to be more "useful" to his students.¹ So in arguing that the classics give the engineer a power of expression which he requires for use as well as for ornament, Professor Sadler² is not committing himself or us to the proposition that none but classicists write well and all classicists do. He simply means what all experience proves, that the study of the classics is on the whole an excellent training in expression,³ perhaps

¹ See Dr. Vaughan in *School Rev.* (1906), 392.

² *School Rev.* (1906), 402-5.

³ A writer in *Educ. Rev.*, XXXVIII, 88-90, argues that the difference of pronunciation makes Latin useless to the English of the high-school student.

a better one than the unpremeditated effusions of "daily themes"¹ and that discipline in the power of exact and lucid expression is a utility for the engineer.² Again, Mr. Kelsey would be the last to rest the case for the classics on the fact that the wider secondary study of Greek would leave the door of choice for the profession of the ministry open to a large number of desirable candidates who now find too late that they lack the indispensable preparation.³ But it is a real if minor consideration to be counted in the sum.

All of these contributions from the professions take for granted the general discipline and cultural values of the classics, and presuppose the fact pointed out by Mr. Loeb and others, that the direct business and technical utilitarian value of the so-called practical college courses is very slight. On this assumption, they supplement the ideal values of the classics by showing that, in the jargon of modern pedagogy, they also possess "adjustment values" for other professions than theology and literature.'

One consideration, however, which constantly recurs in these discussions is fundamental. It is the training which the classics give in the art of interpretation. Classicists sometimes claim for and scientific men concede too much to the study of the classics as a means of developing the powers of expression.⁴ They underestimate its value as a discipline of the intelligence.⁵ They appreciate its stimulus to emotion. They fail to apprehend its subtler effect in blending and harmonizing the two—suffusing thought with feeling, informing feeling with thought. In controversy Huxley and Tyndall were fond of pointing out that the

¹ Cf. Mr. Barrett Wendell's sad surmise (*The Mystery of Education*, 175) that perhaps the reason why the up-to-date Harvard student doesn't write like Addison is that Addison "had never studied English composition as a thing apart." But Addison had studied Latin composition and had a very pretty knack of turning Latin verses.

² Cf. *Outlook*, XCIII (1907), 87.

³ *School Rev.* (1908), 567-79.

⁴ Huxley, *op. cit.*, 130.

⁵ Bentley's *Dissertation on Phalaris*, the type and model of philological method, has been aptly styled "a relentless syllogism." No one can compare the discourses of Renan and Pasteur at the French Academy or the Romanes lectures of Jebb (1899) and Professor Lankester (1904) without feeling that the superiority of the trained classical philologist is not solely or mainly "in the graces." It is in the intellectual qualities of subtlety, wit, sanity, breadth, coherence, and closeness of cogent dialectic that his advantage is most conspicuous. As we are speaking of "disciplinary values" it would be beside the mark to allege what Renan and Jebb would be the first to admit, that Pasteur's work was of greater service to mankind than theirs.

leaders of science expressed themselves with rather more vigor, point, and precision than the ordinary classicist. And their own vivid and fluent eloquence drove the argument home. In general, however, men of science are only too ready to concede with the irony which apes humility that their training has not supplied the graces and literary refinements that are supposed to qualify a man to shine after dinner or to make a good appearance on the platform. But the gifts of eloquence and fluency are sparks of natural endowment which science perhaps quite as often as philology fans into flame.¹ Scientific men may make haste to forget their Latin as Latin. But the mere classicist observes with admiring despair their mastery of the polysyllabic Latinized vocabulary of English. Where he says "if so" they say "in the contemplated eventuality." We must abate our claim that only the classics make men eloquent and emphatic in the expression of their own thoughts.

But it is impossible to claim too much for them as a discipline in the all-important art of interpreting the expressed thought of others. There is no other exercise available for educational purposes that can compare in this respect with the daily graduated critical classroom translation and interpretation of classical texts.² The instinctively sane judgment of intended meanings, the analytic power of rational interpretation—these, natural gifts being equal, are the distinctive marks of the student of classics, in varying degrees, from the secondary-school Latinist, who at least has some inkling of the general implicit logic and structure of language, to the collegian who has been exercised in the equivocations of idiom and synonym, and the finished master who can weigh all the nice considerations that determine the precise shade of meaning or tone of feeling in a speech in Thucydides, a lyric of Aeschylus, a half-jesting, half-serious argument in Plato. Information, knowledge, culture, originality, eloquence, genius may exist without a classical training; the critical sense and a sound feeling for the relativity of meaning rarely, if ever. I have never met in private life or encountered in literature a thinker wholly disdainful of the discipline of the classics who did not betray his deficiency in this respect. I say

¹ On the bad style of classicists cf. *Pop. Sci. Mo.*, I. 707; Gildersleeve, *op. cit.*, 49; Spencer, *Study of Sociology*, 264.

² The argument of Webster (*Forum*, XXVIII, 459 ff.) that the study of a language makes almost no demands upon the reasoning powers refutes itself; cf. Jebb, *op. cit.*, 558; Laurie, *Lectures on Languages and Linguistic Method*, 9-10; Fouillée, 102-3.

SELECTED ARTICLES

in all seriousness that what chiefly surprises a well-trained classicist in the controversial and popular writings of scientific men, especially in the case of the pseudo- or demi-sciences,¹ is not any awkwardness of style or defect in "culture," but the quality of the dialectic and logic, the irrelevancies, the elaborations of metaphors from illustrations into arguments,² the disproportionate emphasis upon trifles and truisms,³ the ignoring of the issue,⁴ the naive dependence on authority,⁵ the outbursts of quaint unction and ornate rhetoric,⁶ the constant liability to

¹ Illustrations of this point are too numerous to quote here, but the repeated misapprehensions of Plato's plainest meanings in *Education as Adjustment*, 10, 62, 63, 90, by M. V. O'Shea, professor of the "science" and art of education in the University of Wisconsin, are typical. If such are the standards of accuracy and criticism of the professor of the science, what will be those of the novices?

² Huxley, *Science and Education*, 81 ff.; Spencer, *passim*; Dr. George E. Dawson, "Parasitic Culture," *Pop. Sci. Monthly*, September, 1910.

³ Cf. in *Culture Demanded by Modern Life* Paget's page on the "certainty that continual or irregular feeding is contrary to the economy of the human stomach."

⁴ E.g., Huxley's extension of "nature" to include "men and their ways," and the fashioning of the affections and of the will," *Science and Education*, 83.

⁵ Typical examples are the use that they make as ultimate authorities of Grote's *Plato*, Lewes' *Biographical History of Philosophy*, Lange's *History of Materialism*, and Draper's *Intellectual Development of Europe*. Cf. Tyndall, *Belfast Address*, "And I have entire confidence in Dr. Draper." Huxley on the study of zoölogy: "What books shall I read? None; write your notes out; come to me for the explanation of anything that you cannot understand." Neither Youmans nor Herbert Spencer could ever be brought to admit the gross error into which Spencer was led (*Data of Ethics*, § 19), by mistinterpreting Bohm's mistranslation of Plato's *Republic*, 339D. For another example, cf. Jhering *op. cit.* Zielinski, 111. Huxley's contrast between history and laboratory science (p. 126) is fallacious. He fails to see that the student of science innocently transfers to literature, history, and language his habit of accepting on faith all experimental results outside of his particular specialty, while the student of classical philology acquires the habit of testing by the original evidence every statement that he hears from his teacher or reads in his textbooks. Cf. Smith, *supra*, p. 589, n. 17; Fouillée *op. cit.*, 62-63, 109.

Those who repeat (e.g. Webster, *Forum*, XXVII, 453) after Spencer (*Education*, 79) that classical training establishes the habit of blind submission to the authority of grammar, lexicon, or teacher simply do not know what goes on in a good classroom. See Zielinski, *op. cit.*, 90-92. Cf. the noble passage in Mill, *op. cit.*, IV, 355, on the spirit of inquiry in Plato and Aristotle which Huxley (*op. cit.* 211), transfers *verbatim* to science, ignoring the all-important qualification, "on those subjects which remain matters of controversy from the difficulty or impossibility of bringing them to an experimental test." Cf. Jebb, appendix to *Sophocles O. T.*, 210. "It is among the advantages and the pleasures of classical study that it gives scope for such discussions as this passage (*O. T.*, 44-45) has evoked."

⁶ "The suction pump is but an imitation of the first act of every newborn infant, nor do I think it calculated to lessen that infant's reverence. . . . when his riper experience shows him that the atmosphere was his helper in extracting the first draught from his mother's bosom" (Tyndall, on the "Study of Physics.")

stumble like a child, or quibble like a sophist,¹ with regard to the fair presumptive meaning of alien, divergent, or hostile utterances.² There is for them no intermediate between the rigid, unequivocal scientific formula and mere rhetoric or sophistry, because they have never been trained to the apprehension of all recorded speech as a text whose full meaning can be ascertained only by a critical, historical, and philological interpretation of the context. The way in which the classics provide us with this training can be fully appreciated only through experience.³ I have attempted a description elsewhere in this journal,⁴ and it has often been set forth by others, and most admirably by the representatives of the law in these symposia.⁵ The law itself is the only discipline comparable to the classics in this regard.⁶ But while more severe perhaps and strictly intellectual it is narrower in its range⁷ and does not include the union of feeling and intelligence which makes the study of the classics an incomparable method of general education. For this reason though the law would be the best available substitute for the discipline of the classics, thoughtful lawyers would be the last to advocate the substitution.

But it is time to turn from these special considerations to a broader view of the whole subject. Classical education is not an academic superstition, an irrational survival of the Renaissance.⁸ It is a universal phenomenon of civilization. Higher non-vocational education has always been largely literary and linguistic, and it has always been based on a literature distinguished from the ephemeral productivity of the hour as classic.

¹ Paget, *op. cit.*, p. 183: "The student of nature's purposes should surely be averse from leading a purposeless existence."

² Spencer, *passim*; Huxley, *op. cit.*, 144: "If their common outfit draws nothing from the stores of physical science." Both Mill and Arnold insist on acquaintance with the *results* of science. Cf. too Huxley's substitution of Middle Ages for Renaissance (*ibid.*, 149-50) and his consequent contradiction of his own admission on p. 209, "that the study of classical literature familiarized men with ideas of the order of nature."

³ Zielinski, *op. cit.*, 31 ff.

⁴ V, 225-29.

⁵ Cf. Starr on the discipline of the judgment and training in the interpretation of texts, *School Rev.* (1907), 412, 415; Evans, *ibid.*, 421. Foster, *ibid.* (1909), 377-79.

⁶ Whewell adds that it is like mathematics, essentially deductive. Without committing ourselves to the "inductive method of learning languages" we may say that the interpretation of a classic text is often an excellent exercise in "inductive-observant" thinking.

⁷ Hutchins, *ibid.* (1907), 427-28.

⁸ For this commonplace see *infra*, p. 601.

It was so at Rome, in China, in Hindustan, and among the Arabs. The Greeks, whose supreme originality makes them an exception to every rule, are only an apparent exception to this—they studied Homer¹ and their own older classics to form, not inform, their minds.² This universal tendency is only in part explained by the religious or superstitious reverence for sacred texts. It is in the main due to an instinctive perception of the principles on which the case for the classics still rests. The education of those who can afford time for non-vocational study is not in the narrower or more immediate sense of the words a “preparation for life”³ but, from the point of view of the individual, a development of the faculties; from the point of view of society, the transmission of a cultural, social, moral tradition.⁴ It must be a broad discipline of the intellectual powers that shall at the same time attune the aesthetic and the moral feelings to a certain key.⁵ No study but that of language and literature can do this, and it is best done through an older and more synthetic form of language and a literature that is, in relation to the student and his environment, classic.⁶ This is the meaning of the late W. T. Harris’s somewhat cryptic Hegelism that self-alienation is necessary to self-knowledge.⁷ Or to put it more concretely, the critical interpretation or translation of such a language supplies the simplest and most effective all-round discipline of the greatest number of faculties. The ideal form and content of such a literature elevated above the trivialities, disengaged from the complexities, disinterested in the conflicts of contemporary life⁸ awakens the aesthetic and literary sense,⁹

¹ Cf. Bréal, 553: “On oublie qu’ils avaient leur antiquité dans l’écopée.”

² Cf. Bain, *Contemp. Rev.* xxxv, 837; “The fact that the Greeks were not acquainted with any language but their own . . . I have never known any attempt to parry this thrust.”

³ For such tautologous formulas as definitions of education cf. my “Discipline in Modern Education,” *The Bookman* (March, 1906), 94: to the list there given add “Adjustment,” which obviously includes everything and therefore anything.

⁴ See Brunetière, *op. cit.*, 406, and the admirable work of Fouillée, *Education from a National Standpoint*, in Appleton’s “International Education Series,” p. 54, and *passim*.

⁵ Arnold’s “relating what we have learnt . . . to the sense for conduct and the sense for beauty.”

⁶ “There are five times as many mental processes to undertake in translating from Latin and Greek into English as there are in translating a modern language.” Lord Goschen; cf. *supra*, n. 21; *infra*, n. 99.

⁷ “Self-alienation which consists in projecting one’s self into the idoms of a dead language,” etc., etc.—P. R. Shipman, *Pop. Sci. Mo.*, XVII, 145.

⁸ Gladstone *op. cit.* Jebb, 570.

⁹ Jebb, 526. Cf. the definition of education as the aesthetic revelation of the world.

ennobles and refines feeling.¹ And the very definition of classic implies that it is the source and chief depository of the national tradition either of religion or culture or both.

For modern Europe these conditions were fulfilled by the study of the classics of Greece and Rome which the Renaissance established in the face of a scholasticism that called itself science,² and which, adapted to altered conditions, we have still to defend against the exclusive pretensions of sciences that, uninformed by the temper of humanism, threaten to renew the spiritual aridity if not the intellectual futility of scholasticism.

The debate which began in the reaction from the Renaissance and found its first notable expression in the famous "quarrel of the ancients and moderns" is now more than two hundred years old.³ New arguments are hardly discoverable at this date.

¹ "Much lost I, something stayed behind,
A snatch maybe of ancient song;
Some breathing of a deathless mind,

Some love of truth, some hate of wrong."—*Ionica*.

² Cf. *University of Illinois Studies*, III, No. vii, p. 29.

³ Not to speak of the polemic of the more illiberal Christian fathers against "pagan" studies, the controversy could be traced back to the opposition of scholasticism and the arts in the mediæval universities; cf. *Univ. of Ill. Studies*, III, No. vii, p. 19, 27 ff. Or we could begin in full Renaissance with the humanist Vives, advocate of the study of the vernacular; with Bacon, who, though himself widely read in the classics and writing in Latin, is the chief source of the rhetoric of the eighteenth and nineteenth-century polemic of scientific men against the classics; or, better yet, with Descartes, who anticipates by two hundred years the type of Spencer and Youmans and President Stanley Hall. Cf. in Cousin, X, 375, his funny letter to Madame Elizabeth deploring Queen Christina's enthusiasm for Greek. So Spencer more in sorrow than in anger comments (*Autobiog.*, II, 183) on Mills' Inaugural which Youmans quotes not quite ingenuously (*Gildersleeve, op. cit.*, 11). It is easy to cite sporadic denunciations of the exclusive study of the classics and satire of bad teaching from the writers of the seventeenth and eighteenth centuries. Sir Thomas Browne, himself steeped in the classics, incidentally writes, anticipating Spencer, in the style of Macaulay: " 'Tis an unjust way of compute, to magnify a weak head for some Latin abilities and to undervalue a solid judgment, because he knows not the genealogy of Hector." Cf. Rigault's well-known book; Macaulay's "Essay on Sir William Temple"; Jebb's Bentley; Brunetière's *Époques*, 220; René Doumier, "La Manie de la Modernité, *Études de Litt. Française*, III, 1-23; Sandys, *History of Classical Scholarship*, II, 403 ff. For the eighteenth century in France with its strange transition from dying pseudo-classicism to the second classical renaissance, see the excellent work of Bertrand, *Fin du Classicisme*, and for Germany, see Paulsen, *Geschichte des Gelhrten Unterrichts*, II. In nineteenth-century controversy, the chief epochs are marked by (1) Sydney Smith's "Too Much Latin and Greek," *Ed. Rev.* (1809)—mainly an attack on Latin verse, etc. Anticlassicists quote from it at second hand "the safe and elegant imbecility of classical learning." They should also quote, "up to a certain point we would educate every young man in Latin and Greek" (2) Macaulay, "The London University," *Ed. Rev.* (1826), a political tract against the Tory opposition in Macaulay's most extreme rhetorical style. With the "Essay on Bacon" it has served as a repertory of fallacies, and it is probably a chief source of Spencer. (3) Spencer's *Essay on Education* (1858-60), mainly an elaboration of the fallacy (anticipated by Plato, *Rep.*, 438E) that knowl-

At the most we may endeavor to weigh the old ones with more discretion, adapt them to the present conditions, and throughout to insist on a vital distinction which defines the issue today. I refer to the distinction between past adjustments or reductions of exclusive or excessive claims of classical studies and present efforts and tendencies to abolish them altogether. Here, as often, a quantitative distinction becomes qualitative, a difference of degree passes into a difference of kind.¹ The truism that Greece and Rome mean less for us than they did for the men of the Renaissance is not even a presumption that they count for little or nothing.² Apart from all technical considerations of curricula, degrees, and educational machinery, it is broadly desirable that classical studies should continue to hold a place in higher education fairly proportionate to their significance for our total culture. They will not hold that place if the representatives of the scientific and "modern" subjects enter into an unholy alliance with the legions of Philistia to swell the unthinking clamor against dead languages and useless studies. Whatever the talking delegates of science may say in their haste, thoughtful scientific men³ require no professor of Greek to tell them that the

edge of "useful things" is for educational purposes necessarily and always the most useful knowledge. To this we may relate the controversies of the fifties and sixties and their prolongation to our own time. See the various papers dating from 1854 on in Huxley's *Science and Education*. The year 1867 marks a date with Mill's *Inaugural* and Youmans' *Culture Demanded by Modern Life*; and *Essays on a Liberal Education*. Before the discussion of these had died away in America the conflict was re-kindled by Charles Francis Adams' *College Fetich*, since which it has been continuous and can very easily be followed in the indices of the *Nation*, the *Atlantic Monthly*, the *Popular Science Monthly*, the various journals of education, the *Independent*, etc. For Germany see Paulsen, *Geschichte des Gelehrten Unterrichts*, II, 441 ff., 505; "Intervention of the Emperor," 620 ff. For France cf. Fouillée, 94, and Translator's Preface, xiii; Weiss, "L'Education Classique," *Revue des deux Mondes*, 1873, V, 392; Brunetière, "La Question du Latin" (review of Raoul Frary), *ibid.*, 1885, VI, 862; Bréal, "La Tradition du Latin," *ibid.* CV, 551.

¹ So already Gildersleeve in 1868 (p. 10): "Sydney Smith's complaint of 'Too much Latin and Greek' has become the war-cry, 'Little Latin and no Greek at all.'"

² For this common *non sequitur* cf. Zieliński, *op. cit.*, 15; Huxley, *op. cit.*, 149; Macaulay, *passim*. The argument is used already by Descartes.

³ I cite a few names at random: Berthelot, *Science et Morale*, 125, favors two types of education, "l'un fondé essentiellement sur les lettres anciennes," etc. Lord Kelvin, in his *Life* by Thompson, p. 1115: "I think for the sake of mathematicians and science students Cambridge and Oxford should keep Greek, of which even a very moderate extent is of very great value." Humboldt's and Emil du Bois Reymond's views are well known (Fouillée, *op. cit.*, 177). See also President A. C. Humphreys in *Proceed. Forty-Eighth Ann. Commence. Penn. State Coll.*, 44. Josiah Cook, *Pop. Sci. Mo.*, XXIV, 1 ff. Frederick B. Loomis, *Independent*, LIX

languages and literatures of the 1300 years of continuous civilization from Homer to Julian subtend a far larger arc of the great circle of knowledge than Sanskrit or Zend or the other specialties to which they are so often compared. Whether they hold this place by their intrinsic beauty and sublimity,¹ by "the grand simplicity of their statement of the everlasting problems of human life,"² by their disciplinary value, by their enormous contribution of facts to the mental and moral and historical sciences³ and the "wisdom of life,"⁴ by their renewal of the intellectual life of Europe at the Renaissance and yet again at the German revival and reorganization of science at the close of the eighteenth century, or as the sources and inspiration of modern literature⁵ and by their still dominant influence in the greatest English poets of the nineteenth century or by all these things together, matters not. They hold the place, and they cannot be relegated to the position of erudite specialties without an emasculation of our discipline and an impoverishment of our culture.⁶

But controversy like all literary forms tends to stereotype itself. Educational conventions still echo to denunciation of abuses as obsolete as the Inquisition. Language that would be an exaggeration if used of the most hide-bound old-style, Latin verse writing English public school, the narrowest French *lycée*,

(1905), 486. Cf. Whitman, Barnes, Pierce, Dabney, Dana in the symposium of April 3, 1909. The hostile testimony (e.g., of Nef) refers largely to required or excessive classics. Cf. the fine words of Huxley, *Science and Education*, 98 and 182. Tyndall, *Fragments of Science* ("Home Library"), 415. Thayer in *St. Louis Congress*, VI, 218: "When in the period of so-called secondary education it is proposed to substitute the study of the natural sciences for a good training in the humanities, there is danger of drying up some of the sources from which this very scientific expansion has sprung." For German scientific men see Holmes, *Nat. Rev.*, XLII, 103 ff.

¹ Jebb, 529; Mill, *op. cit.*, IV, 352: "Compositions which from the altered conditions of human life are likely to be seldom paralleled in their sustained excellence by the times to come."

² Huxley, *Science and Education*, 98.

³ For the propaedeutic implicit or indirect educational values of classical study cf. Shorey in *School Rev.*, V, 226-27; the illustrations drawn from his own teaching by Zieliński, *op. cit.*, 99 ff. ("Ein Philolog kann alles brauchen"); Shorey, "Philology and Classical Philology," *Class. Rev.*, I, 182-83 ff.; Matthew Arnold's charming "Speech at Eton," *Irish Essays*, V; Wenley, "The Nature of Culture Studies," *School Rev.*, June, 1905.

⁴ Mill, *op. cit.*, IV, 354 ff.; Gildersleeve, *op. cit.*, 21; Jebb, *op. cit.*, 540.

⁵ Jebb, *op. cit.*, 54; *infra*, p. 612.

⁶ Cf. among countless quotable utterances to this effect from the chief writers of the nineteenth century, Richter cited by Zieliński, *op. cit.*, 109, and Laurie, *op. cit.*, 186: "Mankind would sink into a bottomless abyss if our youth on their journey to the fair of life did not pass through the tranquil and noble shrine of antiquity." Froude, *Words About Oxford*: "This would be to exclude ourselves from an acquaintance with all past time except in monkish fiction," etc.

is applied to "the tyranny of the classics" in high schools where the teacher is forbidden to use the Bible and is applauded for taking the daily newspaper as a textbook. The protests of French liberals against the former official requirement of a classical education for access to all professions and public offices are transferred to American conditions to which they are wholly inapplicable.¹ The arguments of Sydney Smith denouncing compulsory Latin verse writing and of Macaulay holding a brief for the University of London against the obstructionist prejudices of Oxford or elaborating a false antithesis between the Baconian and the Platonic philosophy are taken from the context² and used in support of policies which Sydney Smith and Macaulay would have been the first to deplore.

It is time to recognize that the work of Huxley, Tyndall, Spencer, Youmans, and President Eliot has been done once for all. "The mere man of letters who affects to ignore and despise science" may have existed in Huxley's England. Today he is as extinct as the dodo. The "enemies of science" of whom Professor Lankester complains are speech automatisms surviving in the rhetoric of science.

The victory of our scientific colleagues is overwhelming, and the Cinderella³ pose is an anachronism.⁴ Huxley was fighting to reform schools in which all boys, whatever their tastes, were compelled to compose Latin verses, and in which, as he said, with gross but then pardonable exaggeration, twelve years' hard study of Greek left the victim unable to construe a page of easy prose. And so today professors of science who are not quite Huxleys step out of their palatial laboratories and splendidly equipped offices to thunder against the obstruction of modern progress by classics in schools where not 2 per cent of the students learn the Greek alphabet, where no one is required to study Latin, and few do study it more than two or three years. They forget that if Huxley were with us today he would probably be pleading for a revival of classical studies.⁵ Whatever the grievances of the past, present attacks on the classics are inspired by the revolt against discipline and hard work, the impatience of all serious

¹ See Shorey in *Proc. 5th Conf. Assoc. Am. Univ.*, 70.

² E.g., by Woodward, *Proceedings Am. Assoc. for Adv. of Sci.*, 1907; cf. *Indep.*, LXII, 107; and by H. W., "The Battle of the Books," *Westminster*, CLX; 425 ff.

³ Spencer, *op. cit.*, 87, copied by all his successors.

⁴ "It seems clear that science nowadays is proud and not literature."—Fouillée, *op. cit.*, 59.

⁵ Cf. the enormous concession in *Science and Education*, 153.

pre-vocational study, the demand for quick utilitarian results, and absorption in the up-to-date.¹ Our scientific colleagues who invoke these sentiments against us will find that they are playing with fire and enlisting allies whom they cannot control. The public will see no logical halting-place between their position and that of Mr. Crane of Chicago. The boy whom they have encouraged to shirk the discipline of Latin will find mathematics and physics still more irksome. The professional constituency of engineers and chemical experts they will retain. But the majority will go snap hunting in the happy fields of English literature and the social sciences. Let not our scientific colleagues deceive themselves. They are more allied to us by the severity and definiteness of their discipline than divided by differences of matter and method. In the fundamental classification of studies into those which exercise and those which titillate the mind they belong with us. You cannot really teach anything by lectures, experience meetings, heart-to-heart talks, the pseudo-Socratic method, and expansion of the student's personality. But you cannot even pretend to teach classics and the exact sciences in this way. In these days that is a bond. As serious workers and teachers you belong with us. The allies whom you encourage to sap our discipline with the "soft moisture of irrelevant sentimentality" will not stop there. They are past masters in what Mrs Wharton calls the art of converting second-hand ideas into first-hand emotions. They will humanize your cold abstract sciences in a way that will surprise you. I quote from the report of a recent educational conference:—

At 3 p. m. Miss N. Andrews, principal of the Happy Grove Girls' School, conducted a regular junior class meeting. A very helpful feature of this meeting was an illustration by the use of iodine and hyposulphite of soda, showing how sin defiles the heart, and how the blood of Jesus can cleanse it.

When this generation of kindergarten Christian Scientists arrives in your laboratories you will wish too late that they had been set to gnaw the file of Latin grammar for a year or two.² You will find a new meaning in Professor Karl Pearson's statement³ that the most valuable acquisitions of his early education were the notions of method which he derived from Greek gram-

¹ Cf. the brilliant and caustic paper by Mrs. Emily James Putnam in *Putnam's*, III, 418; Zieliński, *op. cit.*, 266.

² Cf. Sadler in *School Rev.* (1906), 403: "What can be done in a subject such as physiology when," etc.

³ *Grammar of Science*.

mar.¹ You will admit that after all there may be something in Anatole France's warning that since the methods of science exceed the limitations of children the teacher will confine himself to the terminology. You will be able to interpret Brunetière's remark that neither infancy nor youth can support the intoxication with which science at first dazes its neophytes, and you will sadly verify the accomplishment of George Eliot's prophecy of a generation "dizzy with indigestion of recent science and philosophy."

Such terms as "culture," "discipline," "utility," a "liberal" education have been much bandied about in idle controversy.² They are all, perhaps, equivocal or question-begging, and hardly admit of authoritative definition. Yet you all understand them well enough to know what I mean by saying that the study of the exact sciences yields utility, discipline, and a kind of culture; that classics give culture, discipline, and a kind of utility; and that today they are conjointly opposed to a vast array of miscellaneous "free electives" which are more popular largely because as at present taught they demand and impart neither discipline nor culture nor utility, but only information, entertainment, and intellectual dissipation. These studies fall into two chief groups, the demi-sciences, that is, the so-called moral and social sciences, and modern linguistic and literary studies. I intend no disparagement by the term demi-sciences. There is no higher university work than pioneer exploration of subjects not yet definitely constituted as sciences. But the personal magnetism in the classroom of a Giddings, a Small, a Vincent, a Ross, a Cooley should not blind us to the fact that these studies demand, as Plato said,³ the severest, not the loosest, preparatory training, and that, "freely elected," without such preparation, they will merely muddle the mind of the average American undergraduate.

The outspoken expression of this opinion, which the majority of classicists share, threatens to convert the old warfare of science and classics into a conflict between classics and the social

¹ Cf. also Fouillée, *op. cit.*, 66, top.

² Cf. Huxley, *op. cit.*, 141, on "Real Culture"; Flexner in *Science*, XXIX, 370; Frederick Harrison's satire on Arnold's "Culture and Anarchy," with Arnold's reply; Youmans' "The Culture Demanded by Modern Life"; *Essays on a Liberal Education*, Macmillan, 1867; Newcomb, "What is a Liberal Education?" in *Science*, III, 435; Woodward in *Science*, XIV, 476; Huxley, *op. cit.*, 86; Mrs. Emily James Putnam, *Putnam's*, III, 421.

³ Cf. my paper on "Some Ideals of Education in Plato's Republic," *Educational Bi-Monthly*, February, 1908.

sciences.¹ For the history of this merry war we cannot delay. One point only concerns us here. Sociology and the new psychology have staked out the entire coast of the unknown continent of knowledge and claim all the hinterland. Abstractly and a priori this is plausible enough. An infinite psychologist could pronounce on the credibility of a witness, advise infallibly on the choice of a vocation, and prescribe the proper intellectual diet for every idiosyncrasy. In a finite psychologist it is—well, this is an age of advertising.

Like claims could be made for an abstract or ideal sociology. Education is preparation for life, and human life and mind exist and develop only in and through society.² After the psychologist has annexed everything else, the sociologist may logically swallow him, while the physiologist lies in wait for both. They may be left to fight that out—a hundred or a thousand years hence. But today there is no science of psychology,³ sociology, or pedagogy that can pronounce with any authority on either the aims or the methods of education.⁴ The confident affirmations of our colleagues in these departments are not, then, to be received as the pronouncements of experts, but as the opinions of observers who like ourselves may be partisans.⁵

Throughout this discussion I have taken for granted the general belief of educators, statesmen, and the man in the street, from Plato and Aristotle to John Stuart Mill, Faraday,⁶ Lincoln,⁷ President Taft⁸ and Anatole France, that there is such a thing as intellectual discipline, and that some studies are a

¹ Many representatives of the mental and moral sciences, of course, recognize that classics are still the best available propaedeutic for them; notably Fouillée, and with some reserves Giddings.

² To readers of Plato's *Protogoras* and *Republic*, there is something supremely funny in the statement that "the most important general advance [in psychology from 1881 to 1906] seems to be the recognition that the mind of the human adult is a social product."—E. Ray Lankester, *The Kingdom of Man*, 122.

³ Cf. Jowett's *Plato*, IV, 175, "On the nature and limits of Psychology."

⁴ Cf. Zielinski, *op. cit.*, 23; James, *Talks to Teachers*, 130-37; Anatole France, *Le Jardin d'Epicure*, 218: "Quand la biologie sera constituée, c'est à dire dans quelques millions d'années, on pourra peut-être construire une sociologie"; Shorey, *Class, Jour.*, I, 187; *St. Louis Congress*, III, 370, 375-76.

⁵ Observe the disinterested scientific temper in which Superintendent Harris discusses the psychology of formal discipline: "But Greek is already a vanishing element in our secondary schools, and it needs but a few more strokes to put it entirely *hors de combat*."—*Education*, XXV, 426.

⁶ *Culture Demanded by Modern Life*, 200.

⁷ See Croly, *Promise of American Life*, 91-92.

⁸ *Bryn Mawr Alumnae Quarterly*, IV, No. 2, 79.

better mental gymnastic than others. This, like other notions of "common-sense," is subject to all due qualifications and limitations. But it is now denied altogether, and the authority of Plato, Mill, Faraday, or Lincoln is met by the names of Hinsdale, O'Shea, Bagley, Horn, Thorndike, Bolton, and DeGarmo. Tastes in authorities differ. But these gentlemen are cited, not as authorities, but as experts who have proved by scientific experiment and ratiocination that mental discipline is a myth. There is no such proof, and no prospect of it. There are in general no laboratory experiments that teach us anything about the higher mental processes which we cannot observe and infer by better and more natural methods.¹ Still less are there any that can even approximate to the solution of the complicated problem of the total value and effect of a course of study. There is no authentic deliverance of science here to oppose to the vast presumption of common-sense and the belief of the majority of educated and practical men.² And we are therefore still entitled to ask, If you reject the classics and the elective system is a failure, what are you prepared to substitute?³ Theoretically there are alternatives which, not being a fanatic, I would gladly

¹ Inserting needles into holes, estimating areas, drawing with the hand hidden behind a screen, etc., etc., are all falsifying simplifications of the infinitely complex problem to the solution of which they may or may not lead in the years to come. Nor despite Dr. Dawson's warning against "neurones and connecting fibres fashioned through and through for the study of the Latin language," do we know enough about "localization of function" to argue the question intelligently on this basis. The leading opponents of the idea of mental discipline, whenever they forget themselves, all take it for granted, or make self-stultifying concessions to it.

² Cf. Zieliński, *op. cit.*, 12, 22; Plato, *Republic*, 526B, 527D. There is no space to continue the discussion here. But I doubt whether many competent psychologists will be willing seriously to maintain that serious results have as yet been achieved. The whole recent "unsettlement of the doctrine of formal discipline" took its start as a polemical move and not as a disinterested scientific investigation. And it still bears the impress of its origin. It was perhaps suggested by Youmans' essay on "Mental Discipline in Education," introductory to *The Culture Demanded by Modern Life*. Cf. O'Shea, *Education as Adjustment*, ix: "My chief motive . . . is to try to show that the doctrine of formal training, etc., etc.;" Heck, *Mental Discipline and Educational Values*, I, strangely says, after Monroe, that the doctrine of formal discipline was first clearly formulated in the seventeenth century in defense of classical studies. Professor Bagley, *The Educative Process*, 211, gravely alleges against the doctrine his experience that a year of habituation to hard work at his desk did not discipline him out of a disinclination to regular work on the farm in his summer vacation. This may pair off with the "experiments" which show that students who are compelled to prepare neat papers in one subject will not spontaneously take the same extra pains in other classrooms (*ibid.*, 208.)

³ Cf. Lowell, *Prose Works*, VI, 166: "We know not whither other studies will lead us. . . . We do know to what summits . . . this has led and what the many-sided outlook thence."

see organized into a rational group system.¹ But the practical alternative which anti-classical fanaticism at present offers is formulated by one of your own faculty with the unconscious irony of italics as "*Anything and everything connected with modern life*"—a large order.² Professor King would of course know how to apply this formula with discretion. But he would perhaps be somewhat dismayed to see how it is applied in the short course of the Cokato High School by an enthusiastic convertite who declares that "we are doing some intensive work in spots out in this state regardless of college requirements in English or any other requirements this side of the moon."

The modern literary and linguistic group of studies presents no problem in theory. There may be some question how much Latin those students whose education ends with the high school can afford to take. But the more advanced collegiate and university study of English, modern languages, history, and philosophy without any preparation in classics is a sorry jest.³ The teachers themselves are aware of this when not misled by departmental rivalries or cowed by fatalistic acquiescence in the low standards which the spoiled American boy and the indulgent American parent are forcing upon our schools.⁴ They too must be brought to realize that the cause of the higher culture is one and their lot is bound up with ours.⁵ Our colleagues in modern languages have had their warning from President Schurman. They cannot join the hue and cry against dead classics and retain their seminars in Dante and Old French and their culture courses in Racine and Goethe. For the practical man Corneille and Lessing are as dead as Homer and

¹ Cf. Fouillée, *op. cit.*, 151-52, and Shorey, in *Proceedings of the Fifth Conference of the Associations of American Universities* (February, 1904, 66-67), and in the *Proceedings of the International Congress of Education* (Chicago, 1893, 138).

² *Educational Review*, XXXIII, 469. For a good criticism of this ideal, cf. T. E. Page, in *Edinburgh Review*, XXXIV, 144; Fouillée, *op. cit.*, 136 ff.

³ See Churton Collins, "Greek at the Universities," *Fortnightly* (1905), 260-71.

⁴ Cf. Grandgent, "French as a Substitute for Latin," *School Review*, XII, 462-67; Warren, *Methods of Teaching Modern Languages*, 114: "The first duty of modern language instructors is to preserve as far as possible the advantages derived from the study of the displaced languages, Greek and Latin." As Fouillée says (p. 156), the alternative is either the hotel waiter's cheap polyglotism or the study of living languages by the critical methods applied to the languages called dead. Cf. Jebb, *op. cit.*, 558. Lowell, *op. cit.*, 156: "In a way that demands toil and thought as Greek and Latin, and they only, used to be taught."

⁵ Lowell, *op. cit.*, 157.

Aristotele. His only use for French is "to fight the battle of life—with waiters in French restaurants." Cornell University, possessing the finest Dante library in the country, had not a single student of Dante in 1904.¹ After Greek, Latin, and after Latin, all literary, historical, and philological study of French and German. Convert your departments into Berlitz schools of languages. It is that which you are educating the public to demand, and that is all your students will be capable of. They already complain that anything older or harder than Labische is difficult and useless.²

The teachers of English may lay the same warning to heart. Shakespeare is the belated bard of feudalism. Milton's diction is as obsolete to the readers of Mr. George Ade as his theology. Tennyson is a superannuated representative of the Mid-Victorian compromise. Literature dates from Robert Louis Stevenson; and Mr. Bernard Shaw, Mr. Wells, and Mr. Chesterton are not only clever fellows and shrewd advertisers, but profound thinkers. The Bible, too, is an obsolete and forgotten classic. There is nothing that the unhappy teachers of English can presuppose today. They have sowed the wind and are reaping the whirlwind. Here is a letter recently addressed to the dramatic critic of a great newspaper:—

"I would like to undertake a course of reading on the literature of the stage. . . . I don't want to be directed to Shakespeare, or the Greek dramatists, or to Bell's *British theatre* or to any other compendium of chestnuts that a man with a healthy interest in life would rather saw wood than read.³ I love the theatre and would like to extend my knowledge if any of the live stuff is in print."

There you have the answer to Huxley's oft-repeated argument:—"If an Englishman cannot get literary culture out of his Bible, his Shakespeare, and his Milton, neither in my belief will the pro-

¹ Forman, *op. cit.*, 15.

² Whatever may be said of the difficulty of Latin syntax or Greek irregular verbs, it is no paradox to maintain that the ancient classics are more simple, sane, direct, and lucid, and therefore not only a better educational instrument but easier than the masterpieces of modern literature would be if seriously taught. Cf. Gildersleeve, *op. cit.*, 73: Fouillée, *op. cit.*, 124: "not universally intelligible"; *ibid.*, 158 ff. Shelley's "Prometheus" is harder and more confused than that of Aeschylus, Brunetière, *Question du latin*, 872: "Dante est trop subtil, Shakspeare est trop profond, souvent aussi trop obscur; Goethe est trop savant," etc. So Goldwin Smith *apud* Taylor, 355. Illuminating in this connection is Professor Canby's experience that the despised eighteenth-century Latinized English classics are better for teaching than the Elizabethans or the Romantics. See *Nation* (August 4, 1910), 99.

³ Clearly a disciple of Spencer, who after reading six books of the *Iliad* to "study superstitions" "felt that I would rather give a large sum than read to the end."

foundest study of Homer and Sophocles, Virgil and Horace, give it to him." The question is not whether an Englishman can, but whether the American student will, if the universities encourage the spirit of philistinism to create an atmosphere in which the study of Homer and Sophocles cannot live.¹ You may perhaps reduce classical studies to the position of Sanskrit and Zend and Hebrew. If you do, we shall faithfully hand on the torch of true scholarship to the audience fit and few that remains, and watch with amusement your attempts to teach the history, philology, and higher criticism of English literature in the environment that you have helped to create.² In short, as we said to our scientific colleagues, that the case of the classics is the case of serious discipline in education, so we warn the representatives of the modern humanities that the cause of all humane culture and historic criticism is bound up with the studies that were the first and remain the highest humanities.

There is something to be said for the view that Tennyson, Milton, Goethe, Dante, and Racine are as obsolete as Virgil and Sophocles, and that the modern man's sole requirements are technical experts cheaply hired, indexes to "hold the eel of science by the tail," the command of a "nervous," colloquial English style, a "typewriter girl" to correct his spelling, and a vaudeville to relax his mind. But there is very little to be said for the endeavor to rear a vast fabric of historic and literary scholarship in our universities without laying the indispensable foundations. Our culture might conceivably forego the firsthand knowledge of the supreme literary masterpieces of the world. We might sit down in stolid ignorance of the thousand years of uninterrupted civilization from Aeschylus to Claudian. We might renounce the historical study of the Middle Ages. But that would only be the beginning of our losses. The languages, the literatures, the philosophy, the whole higher spiritual tradition of the past four hundred years are unintelligible without this key.³ It is impossible to explain this to those who have not already in some measure, however slight, verified it in their own experience. The

¹ Cf. *Pop. Sci. Mo.*, XVII, 150: "If I had my way in the halls of education, I would not only dismiss Latin and Greek, but send off packing with them the historical and comparative study of English itself."

² Cf. the wail of Gayley, "The Collapse of Culture," in *Idols of Education*; Barrett Wendell's rueful confessions in *The Mystery of Education*.

³ Cf. Bruneti  re, "La question du latin," *Revue des deux mondes*, 1885, VI, 862 ff.; Clapp, *op. cit.*, 97-98; Shorey, "Relations of Classical Literature to Other Branches of Learning," *St. Louis Congress* (1904) III, 377-85.

detail is too enormous. The books and essays to which I could refer you only skim the surface of the subject.¹ Anything that we could add here would be superfluous for those who know, and of those who will not believe or who cannot divine what we are hinting at we can only say with Doctor Johnson, "Sir, their ignorance is so great that I am afraid to show them the bottom of it." They are not initiated. They do not understand the *lingua franca* of European culture. Its vocabulary, its terms of art and criticism, its terminology of science and philosophy, charged with the cumulative associations of three thousand years, are for them the arbitrary counters of a mechanically memorized Volapük. The inspirations, the standards of taste, the canons of criticism, the dialethic of ideas of the leaders of European civilization for the past four centuries are non-existent for them. They cannot estimate the thought of their own or any other generation, because they do not know how to distinguish its peculiar quality from the common inheritance. Literature and history are to their apprehension all surface. The latent meanings, the second intentions, the allusions and the pre-suppositions escape their sense. They do not divine the existence of the deeper currents.

So much for the ideal. But will the average graduate get all this? No, but he will get something, and the total culture of our country will get more. What will the average school boy get, or the average business man retain, of science?

Once more, let us compare either ideals with ideals or actualities with actualities. We are not saying that it is a great thing for our undergraduates to know a little classics. We are saying that it is a monstrous thing that they should not know any.² It is deplorable to have been taught Latin badly, to have forgotten how to read Virgil or Cicero with pleasure, and to visit your pique in denunciation of the only studies whose loss you seem to regret. But to have had no Latin at all practically means that you do not know the logic or understand the categories of general grammar and those forms of language which are at the

¹ Cf. the bibliography in Shorey, *supra*; Zielinski, *Our Debt to Antiquity*; Mahaffy, "What Have the Greeks Done for Civilization?"; Jebb, *Essays and Addresses*, 541-42, 560; Gildersleeve, *op. cit.*, 23, 44, 60; Churton Collins, *The Study of English Literature*, (Macmillan, 1891). Lowell, VI, 166: "Greek literature is also the most fruitful comment on our own"; 174: "the bees from all climes still fetch honey from the tiny garden-plot of Theocritus" (cf. Kerlin's Yale dissertation, "Theocritus in English Literature").

² Cf. Harris, "A Brief for Latin," *Educational Review*, XVII, 313.

same time forms of thought; that you do not know and cannot safely learn from a lexicon the essential and root meanings of English vocables, and can therefore neither use them with a consciousness of their prime sensuous force¹ nor guard yourself against mixed metaphor;² that you are mystified by the variations of meanings in like Latin derivations in Shakespeare, the Romance languages, and modern English; that you have no historic feeling for the structure of the period which modern prose inherit from Isocrates through Cicero; that the difficulty of learning French or Italian is tripled for you,³ and the possibility of really understanding them forever precluded;⁴ that you have no key to the terminology of science and philosophy, to law and international law Latin, and Latin maxims,⁵ druggists' Latin, botanists' Latin, physicians' Latin; that you cannot even guess the meaning of the countless technical phrases, familiar quotations, proverbs, maxims, and compendious Latin formulae that are so essential a part of the dialect of educated men that the fiercest adversaries of the classics besprinkle their pages with misprints of them;⁶ that you cannot study the early history of modern science and philosophy, or read their masterpieces in the original texts;⁷ that Rome is as remote for you as China; that Virgil, Horace, and Cicero are mere names; that French literature is a panorama without perspective, a series of unintelligible allusions;⁸ that travel in Italy loses half its charm;

¹ Cf. Pater, "On Style," *Appreciations*, 13, 17. It is hardly necessary to answer President Hall's cavil that an obtrusive consciousness and a pedantic use of etymology may sometimes be harmful.

² Gildersleeve, *op. cit.*, 25.

³ It is an exaggeration rather than a misrepresentation when Mill speaks (*op. cit.*, IV, 345) of "that ancient language . . . the possession of which makes it easier to learn four or five of the continental languages than it is to learn one of them without it." On the greater ease with which classicists acquire the languages of India cf. Postgate, in *Fortnightly*, LXXII, 857.

⁴ "Le latin c'est la raison du français."—Vinet; cf. Gildersleeve, *op. cit.*, 34.

⁵ Foster, *School Rev.* (1909), 377; Scott, *ibid.*, 498-501.

⁶ See the works of President Stanley Hall and President Jordan, *passim*; Fouillée, *op. cit.*, 126; Gildersleeve, on Bigelow, *op. cit.*, 9.

⁷ I should like my aspirant to be able to read a scientific treatise in Latin, French, or German, because an enormous amount of anatomical knowledge is locked up in those languages.—Huxley, *Technical Education*, 409; cf. 187. Huxley himself was not happy until he got Greek. Half of Whewell's plea for the study of the history of science in *The Culture Demanded by Modern Life* is concerned with antiquity, and many of the authors mentioned in the other half wrote in Latin.

⁸ Cf. René Doumic, "L'enseignement du latin et la littérature française," in *Etudes sur la litt. franc.* I; Bréal, "La tradition du latin." *Revue des deux mondes*, CV, 551 ff.

that you cannot decipher an inscription on the Appian way, in the Catacombs, in Westminster Abbey, on Boston Common, or on the terrace of Quebec, or verify a quotation from St. Augustine, the Vulgate, the Mass, Bacon, Descartes, Grotius' *On War and Peace*, or Spinoza's *Ethics*, to say nothing of consulting the older documents of English law and institutions, the sources of the civil law, on which the laws of Europe and Louisiana are based, the *Monumenta Rerum Germanicarum*, or Migne's patrologia, or reading a bull of the Pope or a telegram of the German emperor; that, not to go back to Milton and the Elizabethans, who are unintelligible without Latin, you cannot make out the texts from which Addison's *Spectator* discourses, you do not know half the time what Johnson and Boswell are talking about; that Pope and all of the characteristic writers of the so-called Golden Age are sealed books to you; that you are ill at ease and feel yourself an outsider in reading the correspondence of Tennyson and Fitzgerald, or that of almost any educated Englishman of the nineteenth century, and even in reading Thackeray's novels; that half of Charles Lamb's puns lose their point; and that when Punch alludes to the pathetic scene in which Colonel Newcome cries "absit omen!" for the last time, you don't see the joke.

If our scientific colleagues, forgetting outworn polemics and on sober second thought, assure us that the jealous requirements of their stern mistress demand this sacrifice, we can make no reply. Let them deal with purely scientific education and with its symbol, the B.S. degree, in their discretion. But let us hear no more of the farce of a literary, a philosophical, or a historical education that omits even the elements of the languages and literatures on which all literary and historical studies depend for men of European descent. Our acquiescence in such a "collapse of culture" is due to our supine and fatalistic acceptance of the disgracefully low standards which the abuse of the elective system and the premature distraction of the socially precocious and intellectually retarded American boy by the dissipations of modern life and society have imposed upon us. Mill may have overestimated the powers of acquisition of the human mind, but he was far nearer right than we are, who bestow degrees on students who have merely deigned to listen to a few chatty lectures on "anything and everything connected with modern life."

The talk of ten or twelve years' ineffectual study of Latin

and Greek is nonsense or misrepresentation. It is an indictment of human nature and bad teaching, not specially of classical studies. Undisciplined students will doubtless dawdle over anything, from French to mathematics, so long as teachers and parents permit it. But in a serious school one-fourth of the student's time for four or five years is enough for the acquisition, together with the power to read Cicero and Virgil with pleasure, of more English than classmates who omit Latin will probably learn. It is not a formidable undertaking, except for students whose attention is too dissipated and whose minds are too flabby to master anything that must be remembered beyond the close of the current term. There is and always will be ample room for a reasonable amount of Latin in any rational scheme of studies that extends four or more years beyond the graded schools.

Latin is a necessity in anything but an elementary or purely technical education. Greek is not in this sense a necessity.¹ Neither is it a scholastic specialty. It is the first of luxuries, a luxury which no one proposes to prescribe for all collegians, but which ought to be enjoyed by an increasing proportion of those who are now frightened away from it by exaggeration of its difficulty or by utilitarian objections that apply with equal force to the inferior substitutes which partisan advisers recommend in its place. The value and the charm of even a little knowledge of Greek has often been explained,² and has been repeatedly demonstrated in the courses in beginning Greek offered by American colleges in the past decade. Students of good but not extraordinary ability have, while keeping up their other work, read six books of the *Anabasis* in the first year of study; have completed in three years the A.B. requirements of the University of Chicago, including eight books of the *Odyssey*, two Greek tragedies, and Plato's *Apology* and *Crito*, and have in the fourth year of study read the entire *Republic* of Plato with intelligence and

¹ I cannot pause to discuss the misconception of those representatives of science who argue, not quite seriously perhaps, that if only one ancient language is to be studied it should be Greek. This might be true for Mars or China. It is plainly not true for that Europe which was evolved from the Roman empire, and which until the second or German Renaissance received the inspiration of Greece mainly through Latin literature.

² See Jebb, *op. cit.*, 575-80; "A Popular Study of Greek." President Mackenzie, in *School Rev.* (1908), 376, adds the weighty suggestion that those "who do not possess these weapons of a full Christian culture" will tend to read only what is easy and avoid scholarly works that contain even a few Greek words or Latin quotations.

delight.¹ These facts and similar results obtained in other universities are verifiable by any unprejudiced inquirer, and they make it difficult to characterize in parliamentary language the persistent misrepresentation that eight or ten or twelve years' exclusive study of the classics yields no results comparable to those achieved by the normal student in other studies. In the light of this experience no fair-minded dean or judicious adviser of students already biased by unthinking popular prejudice can refuse in Lowell's words to "give the horse a chance at the ancient springs" before concluding that he will not drink.¹

THE WORTH OF ANCIENT LITERATURE TO THE MODERN WORLD²

That the study of the Greek and Latin languages should be now disparaged need cause no surprise, for a reaction against the undue predominance they enjoyed in education a century ago was long overdue. What is remarkable is that the disposition to disparage them and exalt another class of subjects has laid hold of certain sections of the population which were not wont to interest themselves in educational matters, but used to take submissively whatever instruction was given them. It is a remarkable fact; but though remarkable, it is not hard to explain. The most striking feature in the economic changes of the last eighty years has been the immense development of industrial production by the application thereto of discoveries in the sphere of natural science. Employment has been provided for an enormous number of workers, and enormous fortunes have been accumulated by those employers who had the foresight or the luck to embark capital in the new forms of manufacture. Thus there has been created in the popular mind an association, now pretty deeply rooted, between the knowledge of applied science and material prosperity. It is this association of ideas, rather than any pride in the achievements of the human intellect by the unveiling of the secrets of Nature and the setting of her forces at work in the service of man, that has made a knowledge of

¹ *Latest Lit. Essays*, I, 53.

² This article, by Hon. James Bryce, author of *The American Commonwealth* and for several years the British Ambassador at Washington, originally appeared in the *Fortnightly Review*, 107:551-66. April 1917. and was reprinted in the *Living Age*, 293:522-34. June 1917, and by the General Education Board as Occasional Paper No. 6.

physical science seem so supremely important to large classes that never before thought about education or tried to estimate the respective value of the various studies needed to train the intelligence and form the character.

To put the point in the crudest way, the average man sees, or thinks he sees, that the diffusion of a knowledge of languages, literature, and history does not seem to promise an increase of riches either to the nation or to the persons who possess that knowledge, while he does see, or thinks he sees, that from a knowledge of mechanics or chemistry or electricity such an increase may be expected both to the community and to the persons engaged in the industries dependent on those sciences. This average man accordingly concludes that the former or the literary kinds of knowledge have, both for the individual and for the community, far less value than have the latter, *i.e.*, the scientific.

Two other arguments have weight with persons more reflective than those whose mental attitude I have been describing; and their force must be admitted. Languages—not merely the ancient languages, but languages in general—have too often been badly taught, and the learning of them has therefore been found repulsive by many pupils. The results have accordingly been disappointing, and out of proportion to the time and labour spent. Comparatively few of those who have given from six to eight years of their boyhood mainly to the study of Greek and Latin retain a knowledge of either language sufficient to afford either use or pleasure to them through the rest of life. Of the whole number of those who yearly graduate at Oxford or at Cambridge, I doubt if a thirty years of age 15 per cent could read at sight an easy piece of Latin, or 5 per cent an easy piece of Greek. As this seems an obvious sort of test of the effect of the teaching, people come to the conclusion that the time spent on Greek and Latin was wasted.

Let us frankly admit these facts. Let us recognize that the despotism of a purely grammatical study of the ancient languages and authors needed to be overthrown. Let us also discard some weak arguments our predecessors have used, such as that no one can write a good English style without knowing Latin. There are too many cases to the contrary. Nothing is gained by trying to defend an untenable position. We must retire to the stronger lines of defence and entrench ourselves there. You will also agree that the time has come when every one

should approach the subject not as the advocate of a cause but in an impartial spirit. We must consider education as a whole, rather than as a crowd of diverse subjects with competing claims. What is the chief aim of education? What sorts of capacities and of attainments go to make a truly educated man, with keen and flexible faculties, ample stores of knowledge, and the power of drawing pleasure from the exercise of his faculties in turning to account the knowledge he has accumulated? How should the mental training fitted to produce such capacities begin?

First of all by teaching him how to observe and by making him enjoy the habit of observation. The attention of the child should from the earliest years be directed to external nature. His observation should be alert, and it should be exact.

Along with this he should learn how to use language, to know the precise differences between the meanings of various words apparently similar, to be able to convey accurately what he wishes to say. This goes with the habit of observation, which can be made exact only by the use in description of exact terms. In training the child to observe constantly and accurately and to use language precisely, two things are being given which are the foundation of mental vigour—curiosity, *i.e.*, the desire to know—and the habit of thinking. And in knowing how to use words one begins to learn—it is among the most important parts of knowledge—how to be the master and not the slave of words. The difference between the dull child and the intelligent child appears from very early years in the power of seeing and the power of describing: and that which at twelve years of age seems to be dullness is often due merely to neglect. The child has not been encouraged to observe or to describe or to reflect.

Once the Love of Knowledge and the enjoyment in exercising the mind have been formed, the first and most critical stage in education has been successfully passed. What remains is to supply the mind with knowledge, while further developing the desire to acquire more knowledge. And here the question arises: What sort of knowledge? The field is infinite, and it expands daily. How is a selection to be made?

One may distinguish broadly between two classes of knowledge, that of the world of nature and that of the world of man, *i.e.*, between external objects, inanimate and animate, and all the products of human thought, such as forms of speech, literature, all that belongs to the sphere of abstract ideas, and the

record of what men have done or said. The former of these constitutes what we call the domain of physical science; the latter, the domain of the so-called Humanities. Every one in whom the passion of curiosity has been duly developed will find in either far more things he desires to know than he will ever be able to know, and that which may seem the saddest but is really the best of it is that the longer he lives, the more will he desire to go on learning.

How, then, is the time available for education to be allotted between these two great departments? Setting aside the cases of those very few persons who show an altogether exceptional gift for scientific discovery, mathematical or physical, on the one hand, or for literary creation on the other, and passing by the question of the time when special training for a particular calling should begin, let us think of education as a preparation for life as a whole, so that it may fit men to draw from life the most it can give for use and for enjoyment.

The more that can be learnt in both of these great departments, the realm of external nature and the realm of man, so much the better. Plenty of knowledge in both is needed to produce a capable and highly finished mind. Those who have attained eminence in either have usually been, and are to-day, the first to recognize the value of the other, because they have come to know how full of resource and delight all true knowledge is. There are none of us who are here today as students of language and history that would not gladly be far more at home than he is in the sciences of Nature.

To have acquired even an elementary knowledge of such branches of natural history as, for instance, geology or botany, not only stimulates the powers of observation and imagination, but adds immensely to the interest and the value of travel and enlarges the historian's field of reflection. So, too, we all feel the fascination of those researches into the constitution of the material universe which astronomy and stellar chemistry are prosecuting within the region of the infinitely vast, while they are being also prosecuted on our own planet in the region of the infinitely minute. No man can in our days be deemed educated who has not some knowledge of the relation of the sciences to one another, and a just conception of the methods by which they respectively advance. Those of us who apply criticism to the study of ancient texts or controverted historical documents

profit from whatever we know about the means whereby truth is pursued in the realm of Nature. In these and in many other ways we gladly own ourselves the debtors of our scientific brethren, and disclaim any intention to disparage either the educational value or the intellectual pleasure to be derived from their pursuits. Between them and us there is, I hope, no conflict, no controversy. The conflict is not between Letters and Science, but between a large and philosophical conception of the aims of education and that material, narrow, or even vulgar view which looks only to immediate practical results and confounds pecuniary with educational values.

We have to remember that for a nation even commercial success and the wealth it brings are, like everything else in the long run, the result of Thought and Will. It is by these two, Thought and Will, that nations, like individuals, are great. We in England are accused, as a nation and as individuals, of being deficient in knowledge and in the passion for knowledge. There may be some other nation that surpasses us in the knowledge it has accumulated and in the industry with which it adds to the stock of its knowledge. But such a nation might show, both in literature and in action, that it does not always know how to use its knowledge. It might think hard, harder perhaps than we do, but its thought might want that quality which gives the power of using knowledge aright. Possessing knowledge, it might lack imagination and insight and sympathy, and it might therefore be in danger of seeing and judging falsely and of erring fatally. It would then be in worse plight than we; for these faults lie deep down, whereas ours can be more easily corrected. We can set ourselves to gain more knowledge, to set more store by knowledge, to apply our minds more strenuously to the problems before us. The time has come to do these things, and to do them promptly. But the power of seeing truly, by the help of imagination and sympathy, and the power of thinking justly, we may fairly claim to have as a nation generally displayed. Both are evident in our history, both are visible in our best men of science and learning, and in our greatest creative minds.

This is not, I hope, a digression, for what I desire to emphasize is the need in education of all that makes for width of knowledge and for breadth and insight and balance in thinking power. The best that education can do for a nation is to develop and strengthen the faculty of thinking intensely and

soundly, and to extend from the few to the many the delights which thought and knowledge give, saving the people from degenerating into base and corrupting pleasures by teaching them to enjoy those which are high and pure.

Now we may ask: What place in education is due to literary and historical studies in respect of the service they render to us for practical life, for mental stimulus and training, and for enjoyment?

These studies cover and bear upon the whole of human life. They are helpful for many practical avocations, indeed in a certain sense for all avocations, because in all we have to deal with other men; and whatever helps us to understand men and how to handle them is profitable for practical use. [We all of us set out in life to convince, or at least to persuade (or some perhaps to delude) other men, and none of us can tell that he may not be called upon to lead or guide his fellows.]

Those students also who explore organic tissues or experiment upon ions and electrons have to describe in words and persuade with words. For dealing with men in the various relations of life, the knowledge of tissues and electrons does not help. The knowledge of human nature does help, and to that knowledge letters and history contribute. The whole world of emotion—friendship, love, all the sources of enjoyment except those which spring from the intellectual achievements of discovery—belong to the human field, even when drawn from the love of nature. To understand sines and logarithms, to know how cells unite into tissues, and of what gaseous elements, in what proportion, atoms are combined to form water—all these things are the foundations of branches of science, each of which has the utmost practical value. But they need to be known by those only who are engaged in promoting those sciences by research or in dealing practically with their applications. One can buy and use common salt without calling it chloride of sodium. A blackberry gathered on a hedge tastes no better to the man who knows that it belongs to the extremely perplexing genus *Rubus* and is a sister species to the raspberry and the cloudberry, and has scarcely even a nodding acquaintance with the bilberry and the bearberry. None of these things, interesting as they are to the student, touches human life and feeling. Pericles and Julius Caesar would have been no fitter for the work they had to do if they had been physiologists or chemists. No one at a su-

preme crisis in his life can nerve himself to action, or comfort himself under a stroke of fate, by reflecting that the angles at the base of an isosceles triangle are equal. It is to poetry and philosophy, and to the examples of conduct history supplies, that we must go for stimulus or consolation. How thin and pale would life be without the record of the thoughts and deeds of those who have gone before us! The pleasures of scientific discovery are intense, but they are reserved for the few; the pleasures which letters and history bestow with a lavish hand are accessible to us all.

These considerations are obvious enough, but they are so often overlooked that it is permissible to refer to them when hasty voices are heard calling upon us to transform our education by overthrowing letters and arts and history in order to make way for hydrocarbons and the anatomy of the Cephalopoda. The substitution in our secondary schools of the often unintelligent and mechanically taught study of details in such subjects has already gone far, perhaps too far for the mental width and flexibility of the next generation.

If, then, we conclude that the human subjects are an essential part, and for most persons the most essential part, of education, what place among these subjects is to be assigned to the study of the ancient classics, or, as I should prefer to say, to the study of the ancient world? This question is usually discussed as if the forms of speech only were concerned. People complain that too much is made of the languages, and discredit their study, calling them "dead languages," and asking of what use can be the grammar and vocabulary of a tongue no longer spoken among men.

But what we are really thinking of when we talk of the ancient classics is something far above grammar and the study of words, far above even inquiries so illuminative as those which belong to Comparative Philology. It is the ancient world as a whole; not the languages merely, but the writings; not their texts and style merely, but all that the books contain or suggest.

This mention of the books, however, raises a preliminary question which needs a short consideration. Is it necessary to learn Greek and Latin in order to appreciate the ancient authors and profit by their writings? What is the value of translations? Can they give us, if not all that the originals give, yet so large a part as to make the superior results attainable from the originals not worth the time and trouble spent in learning the languages?

Much of the charm of style must, of course, be lost. But is that charm so great as to warrant the expenditure of half or more out of three or four years of a boy's life?

This question is entangled with another, viz., that of the value, as a training in thought and in the power of expression, which the mastery of another language than one's own supplies. I will not, however, stop to discuss this point, content to remark that all experienced teachers recognize the value referred to, and hold it to be greater when the other language mastered is an inflected language with a structure and syntax unlike those of modern forms of speech, such as Latin and Greek, and such as Icelandic, together with some of the Slavonic languages, almost alone among modern civilized languages, possess. Let us return to the question of the worth of translations. It is a difficult question, because neither those who know the originals nor those who do not are perfectly qualified judges. The former, when they read their favourite author in a translation, miss so much of the old charm that they may underestimate its worth to the English reader. The latter, knowing the translation only, cannot tell how much better the original may be. It is those who, having read an author in a translation, afterwards learn Greek (or Latin) and read him in the original, that are perhaps best entitled to offer a sound opinion.

Prose writers, of course, suffer least by being translated. Polybius and Procopius, Quintus Curtius, and Ammianus Marcellinus can give us their facts, Epictetus and the Emperor Marcus their precepts and reflections, almost as well in our tongue as in their own. Most of us find the New Testament more impressive in English, which was at its best in the early seventeenth century, than in Hellenistic Greek, which had declined so far in the first and second centuries as to be distasteful to a modern reader who is familiar with the Attic writers. The associations of childhood have also had their influence in making us feel the solemnity and dignity of the English version. Even among writers of prose there are some whose full grace or force cannot be conveyed by the best translation. Plato and Tacitus are examples, and so, among moderns, is Cervantes, some of whose delicate humour evaporates (so to speak) when the ironical stateliness of his Castilian has to be rendered in another tongue. The poets, of course, suffer far more, but in very unequal degree. Lucan or Claudian, not to speak of Apollonius Rhodius, might

be well rendered by any master of poetical rhetoric such as Dryden or Byron. But the earlier bards, and especially Pindar and Virgil, Sophocles, and Theocritus, are untranslatable. If one wants to realize how great can be the loss, think of the version Catullus produced of Sappho's ode that begins *Φαίνεται πολ* *ζείνο λοδ θεούσιν*. The translator is a great poet and he uses the same metre, but how low in the Latin version do the fire and passion of the original burn! In the greatest of the ancients the sense is so inwoven with the words and the metre with both that with the two last elements changed the charm vanishes. Whatever admiration we may give to some of the verse renderings of Homer and to some of those admirable prose renderings which our own time and country have produced, one has to say of them all much what Bentley said to Pope, "A very pretty poem, but you must not call it Homer." The want, in English, of any metre like the Greek hexameter is alone fatal.

If we are asked to formulate a conclusion on this matter, shall we not say that whoever wishes to draw from the great ancients the best they have to give must begin by acquiring a working acquaintance with, though not necessarily a complete grammatical mastery of, the languages in which they wrote? Those who cannot find time to do this will have recourse to such translations, now readily obtainable, as convey accurately the substance of the classical writers. Style and the more subtle refinements of expression will be lost, but the facts, and great part of the thoughts, will remain. The facts and the thoughts are well worth having. But that real value and that full delight which, as I shall try to indicate, the best ancient authors can be made to yield to us can be gained only by reading them in the very words they used.

This would be the place for an examination of the claims of modern languages. Both the practical utility of these languages, and especially of Spanish, hitherto far too much neglected, and their value as gateways to noble literatures, are too plain to need discussion. The question for us here to-day is this: Are these values such as to enable us to dispense with the study of the ancient world? I venture to believe that they do not, and shall try in the concluding part of this address to show why that study is still an essential part of a complete education.

But before entering on the claims of the classics, a word must

be said on a practical aspect of the matter as it affects the curricula of schools and universities. I do not contend that the study of the ancients is to be imposed on all, or even on the bulk, of those who remain at school till eighteen, or on most of those who enter a university. It is generally admitted that at the universities the present system cannot be maintained. Even of those who enter Oxford or Cambridge, many have not the capacity or the taste to make it worth while for them to devote much time there to Greek and Latin. The real practical problem for all our universities is this: How are we to find means by which the study, while dropped for those who will never make much of it, may be retained, and forever securely maintained, for that percentage of our youth, be it 20 or 30 per cent or be it more, who will draw sufficient mental nourishment and stimulus from the study to make it an effective factor in their intellectual growth and an unceasing spring of enjoyment through the rest of life? This part of our youth has an importance for the nation not to be measured by its numbers. It is on the best minds that the strength of a nation depends, and more than half of these will find their proper province in letters and history. It is by the best minds that nations win and retain leadership. No pains can be too great that are spent on developing such minds to the finest point of efficiency.

We shall effect a saving if we drop that study of the ancient languages in the case of those who, after a trial, show no aptitude for them. But means must be devised whereby that study shall, while made more profitable through better methods, be placed in a position of such honour and importance as will secure its being prosecuted by those who are capable of receiving from it the benefits it is fitted to confer.

For the schools the problem is how to discover among the boys and girls those who have the kind of gift which makes it worth while to take them out of the mass and give them due facilities for pursuing these studies at the higher secondary schools, so that they may proceed thence to the universities and further prosecute them there. Many of you, as teachers, know better than I how this problem may be solved. Solved it must be, if the whole community is not to lose the benefit of our system of graded schools.

Returning to the question of what benefits we receive from

the study of the ancient world as it speaks to us through its great writers, I will venture to classify those benefits under four heads.

I. Greece and Rome are the well-springs of the intellectual life of all civilized modern peoples. From their descent to us poetry and philosophy, oratory, and history, sculpture and architecture, even (through East Roman or so-called "Byzantine" patterns) painting. Geometry, and the rudiments of the sciences of observation, grammar, logic, politics, law, almost everything in the sphere of the humanistic subjects, except religion and poetry inspired by religion, are part of their heritage. One cannot explore the first beginnings of any of these sciences and arts without tracing it back either to a Greek or to a Roman source. All the forms poetical literature has taken, the epic, the lyric, the dramatic, the pastoral, the didactic, the satiric, the epigrammatic, were of their inventing; and in all they have produced examples of excellence scarcely ever surpassed, and fit to be still admired and followed by whoever seeks.

To the ancients, and especially to the poets, artists, and philosophers, every mediæval writer and thinker owed all he knew, and from their lamps kindled his own. We moderns have received the teaching and the stimulus more largely in an indirect way through our mediæval and older modern predecessors, but the ultimate source is the same. Whoever will understand the forms which literature took when thought and feeling first began to enjoy their own expression with force and grace, appreciating the beauty and the music words may have, will recur to the poetry of the Greeks as that in which this phenomenon—the truest harbinger of civilisation—dawned upon mankind. The influences of the epic in the Homeric age, of the lyric in the great days that begin from Archilochus, of the drama from Aeschylus onwards—these are still living influences, this is a fountain that flows to-day for those who will draw near to quaff its crystal waters. In some instances the theme itself has survived, taking new shapes in the succession of the ages. One of such instances may be worth citing. The noblest part of the greatest poem of the Roman world is the sixth book of the *Aeneid* which describes the descent of the Trojan hero to the nether world. It was directly suggested to Virgil by the eleventh book of the *Odyssey*, called by the Greeks the *Nekuia*, in which Odysseus seeks out the long-dead prophet Tiresias to learn from

him how he shall contrive his return to his home in Ithaca. The noblest poem of the Middle Ages, one of the highest efforts of human genius, is that which Dante describes his own journey down through Hell and up through Purgatory and Paradise till at last he approaches the region where the direct vision of God is vouchsafed to the ever blessed saints. The idea and many of the details of the *Divina Commedia* were suggested to Dante by the sixth *Aeneid*.¹ The Florentine poet who addresses Virgil as his father is thus himself the grandchild of Homer, though no line of Greek was ever read by him. In each of these three Nekuiai the motive and occasion for the journey is the same. Something is to be learnt in the world of spirits which the world of the living cannot give. In the first it is to be learnt by a single hero for his own personal ends. In the second Aeneas is the representative of the coming Rome, its achievements and its spirit. In the third the lesson is to be taught to the human soul, and the message is one to all mankind. The scene widens at each stage, and the vision expands. The historical import of the second vision passes under the light of a new religion into a revelation of the meaning and purpose of the universe. How typical is each of its own time and of the upward march of human imagination! Odysseus crosses the deep stream of gently-flowing Ocean past a Kimmerian land, always shadowed by clouds and mists, to the dwelling of the dead, and finds their pale ghosts, unsubstantial images of their former selves, knowing nothing of the Present, but with the useless gift of foresight, saddened by the recollection of the life they had once in the upper air—a hopeless sadness that would be intense were their feeble souls capable of anything intense. The weird mystery of this home of the departed is heightened by the vagueness with which everything is told. That which is real is the dimness, the atmosphere of gloom, a darkness visible which enshrouds the dwellers and their dwelling-place.

The Hades of Virgil is more varied and more majestic. In it the monstrous figures of Hellenic mythology are mingled with personifications of human passions. We find ourselves in a

¹ It is perhaps not too fanciful to suggest that the part played by Circe in the *Odyssey* suggests that played by the Cumæan Sibyl in the *Aeneid* and the latter the appearance of his Guide to Dante. So the line of hapless heroines whom Odysseus sees (Book xi. ll. 225-332) reappears with variations in *Aeneid* vi. 445, introducing the touching episode of the address of Aeneas to Dido; and among the sorrowful figures whom Dante meets none are touched more tenderly than Francesca in the Inferno and la Pia in the Purgatorio.

world created by philosophic thought, far removed from the childlike simplicity of the *Odyssey*. There are Elysian fields of peace, with a sun and stars of their own, yet melancholy broods over the scene, the soft melancholy of a late summer evening, when colours are fading from the landscape.

In the *Divine Comedy* we return to something between the primitive realism of early Greece and the allegorical philosophy of Virgil. Dante is quite as realistic as Homer, but far more vivid; he is as solemn as Vigil, but more sublime. The unseen world becomes as actual as the world above. Everything stands out sharp and clear. The Spirits are keenly interested in the Past and the Future, though knowing nothing (just as in Homer) of the Present. Ghosts though they may be, they are instinct with life and passion, till a region is reached in highest heaven of which neither Homer nor Virgil ever dreamed, because its glory and its joys transcend all human experience. Three phases of thought and emotion, three views of life and what is beyond life, of the Universe and the laws and powers that rule it, find their most concentrated poetical expression in these three visions of that Place of Spirits, which has always been present to the thoughts of mankind as the undiscovered background to their little life beneath the sun.

II. Secondly. Ancient classical literature is the common possession, and, with the exception of the Bible and a very few mediæval writings, the only common possession, of all civilised peoples. Every well-educated man in every educated country is expected to have some knowledge of it, to have read the greatest books, to remember the leading characters, to have imbibed the fundamental ideas. It is the one ground on which they all meet. It is therefore a living tie between the great modern nations. However little they may know of one another's literature, they find this field equally open to them all, and equally familiar. Down till the seventeenth century the learned all over Europe used Latin as their means of communication and the vehicle of expression for their more serious work in prose. Ever since the Renaissance gave Greek literature back to Western and Central Europe and turned the critical labours of scholars upon ancient writings, scholars in all countries have vied with one another in the purifying of the texts and elucidation of the meaning of those writings; and this work has given occasion for constant intercourse by visits and correspondence

between the learned men of England, Scotland, France, Germany, Italy, Holland, Denmark. Thus was maintained, even after the great ecclesiastical schism of the sixteenth century, the notion of an international polity of thought, a Republic of Letters. The sense that all were working together for a common purpose has been down to our own days, despite international jealousies (now, alas! more bitter than ever before), a bond of sympathy and union.

III. Thirdly. Ancient History is the key to all history, not to political history only, but to the record also of the changing thoughts and beliefs of races and peoples. Before the sixth century B. C. we have only patriarchal or military monarchies. It is with the Greek cities that political institutions begin, that different forms of government take shape, that the conception of responsible citizenship strikes root, that both ideas and institutions germinate and blossom and ripen and decay, the institutions overthrown by intestine seditions, and finally by external power, the ideas unable to maintain themselves against material forces, and at last dying out because the very discussion of them, much less their realization, seemed hopeless, and it only remained to turn to metaphysical speculation and ethical discourse. But the ideas and the practice, during the too brief centuries of freedom, had found their record in histories and speeches and treaties. These ideas bided their time. These give enlightenment to-day, for though environments change, human nature persists. That which makes Greek history so specially instructive and gives it a peculiar charm is that it sets before us a host of striking characters in the fields of thought and imaginative creation as well as in the field of political strife, the abstract and the concrete always in the closest touch with one another. The poets and the philosophers are, so to speak, a sort of chorus to the action carried forward on the stage by soldiers, statesmen, and orators. In no other history is the contact and interworking of all these types and forces made so manifest. We see and understand each through the other, and obtain a perfect picture of the whole.

So also are the annals of the Imperial City a key to a history, but in a different sense. The tale of the doings of the Roman people is less rich in ideas, but it is of even higher import in its influence on all that came after it. As Thought and Imagination are the notes of the Hellenic mind, so Will and Force are the

notes of the Roman—Force with the conceptions of Order, Law, and System. It has a more persistent and insistent volition, a greater gift for organization. Roman institutions are almost as fertile by their example as the Greek mind was by its ideas. Complicated and cumbrous as was the constitution of the Roman Republic, we see in it almost as wonderful a product of fresh contrivances devised from one age to another to meet fresh exigencies as in the English Constitution itself, and it deserves a scarcely less attentive study. But high as is this permanent value for the student of politics, still higher is its importance as the starting-point for the history of the European nations, some of whom it had ruled, all of whom it taught. It created a body of law and schemes of provincial and municipal administration, which, modified as all these have been by mediæval feudalism, became the basis of the governmental systems of modern States. Still more distinctly was the Roman Empire in West and East the foundation on which the vast fabric of church government has been raised. As the religious beliefs and superstitions and usages of the Romano-Hellenic world affected early Christianity, so did the organization of the Empire serve as a model for the organization of the Christian Church. Without a knowledge of these things it is impossible to understand ecclesiastical history. The riddles of the Middle Ages—and they are many—would be insoluble without a reference back to what went before; nor need I remind you how much of the Middle Ages has lasted down into our own days, nor how in the fifteenth century the long-silent voices of ancient Greece awoke to vivify and refine the thought and the imagination of Europe.

IV. Lastly, the ancient writers set before us a world superficially most unlike our own. All the appliances, all the paraphernalia of civilisation were different. Most of those appliances were indeed wanting. The Athenians in their brightest days had few luxuries and not many comforts. They knew scarcely anything about the forces of Nature, and still less did they know how to turn them to the service of man. Their world was small. The chariot of their sun took less than five hours to traverse the space between the Euphrates and the Pillars of Hercules, and many parts within that space were unknown to them. Civilised indeed they were, but theirs was a civilisation which consisted not in things material, but in art and the love of beauty, in poetry and the love of poetry, in music and a

sensibility to music, in a profusion of intelligence active, versatile, refined, expressing its thoughts through wonderfully rich and flexible forms of speech. There was little wealth and little poverty, some inequality in rank but not much in social relations: women were secluded, slavery was the basis of industry. Yet it was a complete and perfect world, perfect in almost everything except religion and those new virtues, as one may call them, which the Gospel has brought in its train. Human nature was, in essentials, what it is now. But it was a youthful world, and human nature appeared in its simplest guise. Nature was all alive to it. It looked out on everything around it with the fresh curiosity of wide-open youthful eyes. As the Egyptian priest said to Solon, with a deeper wisdom than perhaps he knew, the Greeks were children. Like children, they saw things together which moderns have learnt to distinguish and to keep apart. Their speculations on ethics and politics were blent with guesses at the phenomena of external nature, religion was blent with mythology, poetry with history, gods with men. It is good for us, in the midst of our complex and artificial civilisation, good for us in whom the sense of beauty is less spontaneous, whose creative power is clogged by a weariness of the past, and who are haunted by doubts of all that cannot be established by the methods of science, to turn back to these simpler days, and see things again in their simplicity, as the men of Athens saw them in the clear light of a Mediterranean dawn. The dawn is the loveliest moment of the day, and there are truths best seen in the innocent freshness of morning.

The poets of the early world did not need to strain after effect. They spoke with that directness which makes words go, like arrows, straight to their mark. Strength came to them without effort. As no prose narratives have ever surpassed the description in the seventh book of Thucydides of the Athenian army's retreat from Syracuse, so no narratives, in prose or poetry, except perhaps some few in the earlier books of the Old Testament and in the Icelandic sagas, have ever equalled the telling of the tales contained in the *Odyssey*, such as that in which Eumaeus recounts to Odysseus how he was brought in childhood from his native home to Ithaca. Even among the later classic poets this gift of directness remains. It is one of the glories of Lucretius. What can be more impressive in simple force than the lament of Moschus over Bion, or the lines of

Catullus that begin with "Vivamus, mea Lesbia, atque amemus"? However, I return to that which the study of the ancient world can do for our comprehension of the progress and life of mankind as a whole. It is the constant aim, not only of the historian, but of whosoever desires to have a just view of that progress, distinguishing the essential and permanent from the accidental and transitory, and noting the great undercurrents of which events are only the results and symptoms—it is and must be his aim to place before his eyes pictures of what man was at various points in his onward march, seeing not only how institutions and beliefs grow and decay, but also how tastes and gifts, aptitudes and virtues, rise and decline and rise again in new shapes, just as the aspects of a landscape change when clouds flit over it, or when shafts of light strike it from east or south or west. For this purpose it is of the utmost value to know human societies in the forms they took when civilised society first came into being. How fruitful for such a study are the successive epochs of the Greco-Roman world! Take, for example, the latest age of the Roman Republic as we see it depicted by Sallust and Catullus, Appian and Plutarch, and best of all in Cicero's speeches and letters. The Republic was tottering to its fall: dangers were gathering from within and without. Caesar's conquests were bringing Gaul under Roman dominion and Britain into the knowledge of civilised men. Lucretius was presenting the doctrines of Epicurus as a remedy against superstition: Cicero and his friends were trying, like Boethius five centuries later, to find consolations in philosophy. But no one could divine the future, no one foresaw the Empire or the advent of a new religion.

Or take the epoch of Periclean Athens. The memory of Salamis, where Aeschylus and his brother had fought, was still fresh. Thucydides, not yet a historian, was sailing to and fro to his gold-mines in Thrace opposite Thasos. Herodotus was reciting the tale of his travels in the cities. Socrates was beginning his quest for wisdom by interrogating men in the market-place. Athenian fleets held the sea, but the Peloponnesians were already devastating Attica. Phidias and his pupils were finishing the frieze of the Parthenon, Cleon was rising into note by the vehemence of his harangues. The same crowd that applauded Cleon in the Pnyx listened with enjoyment to the *Philoctetes* of Sophocles, a drama in which there is no action

save the taking away and giving back of a bow, all the rest being the play of emotions in three men's breasts, set forth in exquisite verse.

Or go back to the stirring times of Alcaeus and Sappho, when Aeolian and Ionian cities along the coasts of the Aegean were full of song and lyre, and their citizens went hither and thither in ships fighting, and trading, and worshipping at the famous shrines where Hellenic and Asiatic religions had begun to intermingle, before the barbaric hosts of Persia had descended upon those pleasant countries.

Or ascend the stream of time still further to find, some centuries earlier, the most perfect picture of the whole of human life that was ever given in two poems, each of them short enough to be read through in a summer day. Think in particular of one passage of 130 lines, the description of the Shield of Achilles in the eighteenth book of the *Iliad*, where many scenes of peace and war, of labour and rejoicing, are presented with incomparable vigour and fidelity. Each vignette has been completed with few strokes of the brush, but every stroke is instinct with life and dazzling with colour. We see one city at peace, with a wedding procession in the street and a lawsuit in the market-place, and another city besieged, with a battle raging on the banks of the river. We see a ploughing, and a harvest, and a vintage, and a herd attacked by lions, and a fair pasture with fleecy sheep, and, last of all, a mazy dance of youths and maidens, "such as once in Crete Daedalus devised for the fair-tressed Ariadne." Above these the divine craftsman had set the unwearied sun and the full-orbed moon and the other marvels wherewith heaven is crowned, and round the rime of the shield rolls the mighty strength of the stream of Ocean.

To carry in our minds such pictures of a long-past world and turn back to them from the anxieties of our own time gives a refreshment of spirit as well as a wider view of what man has been, and is, and may be hereafter. To have immortal verse rise every day into memory, to recall the sombre grandeur of Aeschylus and the pathetic grandeur of Virgil, to gaze at the soaring flight and many-coloured radiance of Pindar, to be soothed by the sweetly flowing rhythms of Theocritus, what an unfailing delight there is in this! Must not we who have known it wish to hand it on and preserve it for those who will come after us?

THE VALUE OF THE CLASSICS TO THE STUDENT OF ENGLISH¹

The case for the classics does not rest upon their value to the student of English. That is not the chief reason why they are and of right ought to be studied; but it is one reason and a good reason. There are times both in war and in grammar when it is sound strategy to bring forward the auxiliaries and to put the subordinate in a principal position. The present seems to be an opportune time for an evolution of this kind. For English is now the central study of all public high schools. It is in esteem even in vocational institutions of so uncompromising a type that the word *Acropolis*, if pronounced distinctly within their walls, would sound like the name of a patent fertilizer. It is honored in the commercial high schools, both as a substitute for subjects that the youth of the land have found very troublesome and as the last mark of devotion to idealism and patriotism. Your business friend who never notifies but always "advises" you that your goods have arrived is "strong for English," by which he means spelling and idiom that suit his own predilections and conform to the conventions of the trade. Indeed, all of Germany and nearly all of the United States are in favor of the study of English, though the reasons for this partiality are (as the catalogue of an enterprising engineering school once described its own courses) "very various." If then it can be shown that some knowledge of the classics is needed by the student of English the case for the classics is strengthened for everybody. In presenting this need I imagine myself addressing, not a body of learned classical professors and teachers, but a group of those whom Dr. Blimber was accustomed to call "My young friends"—students doubtful about beginning or continuing classical studies, but ambitious to gain a mastery over English.

What we all desire as a result of English study is fluency and accuracy in our own speech and real understanding and appreciation when we read the speech of others. Among ambitious youth the first object of desire is the increase of available vocabulary. Here the facts are reassuring and the opportunities unlimited. There are three great funds of words in the English vocabulary. There is a fund of native English words, a fund

¹ Joseph V. Denney, Professor of English, Ohio State University. The Classical Journal. 9:94-101. December, 1913.

of Romance words which have come to us from Latin through the French, and a very large fund which we have derived directly from the Latin and Greek. The last two funds are now really one huge and ever-increasing word-hoard, though it is still useful to remind ourselves that we have three words for every idea that we wish to express—three at least, and often more than three. With these three funds to draw upon—the native fund, the Romance fund, the classical fund—the student of English is poverty-stricken if he must forever *guess* and remains ignorant of his capacity to *surmise* or *conjecture*. He is *tiresome*, *boresome*, *fatiguing*, *exhausting*, *debilitating* if a *freak* is always a freak to him and never a *caprice*, a *vagary*, or an *eccentricity*. He lacks experience if he has seen a *ghost* and never an *apparition* or a *specter*. He is not even much of a *trickster* if he knows only *craft* and has neither *deceit*, *subtlety*, nor *artifice*. What satisfaction is there for his feelings in calling some *dolt* a *stupid* and stopping there? Isn't the fool also *dull* and *obtuse*, and probably *thick-skinned*, *callous*, and *indurated* into the bargain? To pass from vituperation to its opposite, the Book of Common Prayer abounds in such duplicates as *times* and *occasions*, *pray* and *beseech*, *changes* and *alterations*, *acknowledge* and *confess*, *adorned* and *beautified*, *assemble* and *meet together*, *weighty* and *important*, *remission* and *forgiveness*, *sins* and *transgressions*, *requisite* and *necessary*, *pardon* and *forgive*, *dissemble* and *cloak*, *image* and *similitude*, *loving* and *amiable*, *enterprized* and *taken in hand*. What would Bryant have done with his beautiful "Fringed Gentian" if he had had but the one word "blue" to describe its color? or even but the two words, *blue* and *azure*? We can see his dire need of a three- or four-syllable word in the lines—

Then doth thy mild and quiet eye
Look through its fringes to the sky—
Blue, blue as if that sky let fall
A flower from its cerulean wall.

The practical needs of the poet are not to be overlooked in this materialistic age. Now if this twofold and threefold characteristic of our vocabulary were not well-night universal it would deserve but passing remark. But it is the big fact about English, the fact that especially concerns the man who calls

himself practical and who seeks fluency and accuracy from his study of language. His rightful heritage is three or more words for every idea. Does he command them? Do they come when he needs them? Is he satisfied with the one word for *building* or *house*, or does he know also dwelling, shelter, domicile, habitation, residence, edifice, structure, fastness, stronghold, palace, cottage, hall, hovel, mansion, manor, castle, hut, fortress, construction, fortification, retreat, sanctuary—as he has need and occasion to use any one of these? These, whether of native or classical origin, are now indiscriminately English words. But practical young America will say, "Why should I be at the labor of studying Latin in order to add them to my usable vocabulary? Why not go straight to the dictionary or to a book of synonyms? Why not make lists and memorize them?" One reason is that they will not stay memorized, if accumulated in any such wholesale or mechanical fashion. The dictionary will not tell you what you need to know unless you have enough Latin (1) to get the value of suffixes and prefixes, (2) to get the root-meaning, and (3) the training to discern the original image back of the root-meaning. These things are possible only as one acquires one's words to meet a real and immediate need of expressing ideas. Chiefly they are the result of painstaking translation.

A second reason is that, what I have said above, about three words for every idea, is not strictly true. No matter how similar in meaning words may be, there is always a difference in their possible applications, a difference due to tone, spirit, temper, to the influence of associated words, or to arbitrary usage. The choice of words thus becomes a matter of telling or not telling the truth. Expertness in phrase-making and in the use of prepositions depends upon a true perception of root-images. Burke's expression of a common idea, "In this *posture* things *stood*," reveals his sense for true association of images. Untrained by his Latin he would doubtless have said: "Things were about like that." No one ever achieves perfection in this difficult business; the deplorable fact is that so many young people never begin it at all. Even a little Latin or Greek is valuable here. At least it will enable one to detect the broader distinctions—to reach certainty about memoranda, propaganda, and formulae, for instance—and it may induce good habit. At any rate, no vocational guide that I ever set eyes on is wise enough to tell any young American at the beginning of his

high-school course that this part of his education may safely be neglected. Even an instructor of the deaf and dumb in mat-weaving must needs make an occasional distinction. And is it not true that the men of a half-century ago who spoke with such power against the classical training of their day were able to make the distinctions by which they carried their cause to victory mainly because they had enjoyed the benefits of that same classical training? Compare their utterances with those of the later breed of Philistines, and the difference is as great as that noted by Mark Twain between lightning and the lightning bug.

The student of accuracy in English needs Latin or Greek in order that he may master the Grammar of English. I am well aware that teachers of elementary Latin would like it if their pupils came to Latin fully competent in English grammar. The wish is vain. Only by comparison in kind can grammatical concepts be firmly fixed. A second language with which to compare the English procedure is a necessity if the English grammar is to be mastered. Thousands of people have testified to the fact that not until they studied a second language did English grammar become clear to them. And the second language should by all means be Latin, partly because of the completeness of its grammatical apparatus, but chiefly because the native English sentence was first made orderly, logical, serviceable, and efficient under the influence of the grammar of Latin. It was the destruction of the previous Latin civilization in England by the Danish invasions of the ninth century that suggested to Alfred the need of translations by the few priestly scholars still remaining who could render their services in English, or translate an epistle into the vernacular. "God Almighty be thanked," wrote the pious king, as he thought of the ignorance of his clergy, "that we have now *any* teachers in office." Translations followed during the next century, with the result that is usual when thought is transferred from a language that is equipped with a mature and logical syntax to a language still crude and primitive. The English sentence acquired something like a standard of grammatical and logical competency; not that Latin idiom was bodily transferred, but that English idiom became self-conscious and capable of self-improvement. The English of the average youth of today needs precisely that discipline. One of the chief benefits of the study of the Latin grammar and the practice of Latin composition is that the

Latin syntax compels logical statement. The Latin sentence represses waywardness and teaches many lessons of method and order that are not easily or economically learned by practice in English alone. The English does not compel a boy to stop and think what he is about. He does not see the need of it. The English grammar is to him a superfluity and an impudent interference with the rights of man. He readily concedes, however, that it is necessary to attend to grammatical detail when he is trying to master another tongue. If that other tongue be Latin or Greek it gradually equips him with grammatical concepts that serve him equally well in practicing his own speech. The management of clauses, for instance, of tense, sequence, of indirect discourse, of linking apparatus, of position and preposition—so troublesome in writing English, is learned through Latin as a matter of necessity; it is seldom learned thoroughly through English alone, as any journalist can testify or illustrate. The right attitude toward questions of English grammar is achieved only when there is possibility of constant comparison and contrast. It is not pertinent to my purpose here to bring forward the well-known fact that historically the Latinists in certain periods of English literature have not proved a salutary influence upon the English sentence. It is sufficient to note that the things complained of—involved clauses, and overburdened sentences—are favorite faults of speech with those who have shunned Latin for fear of spoiling their English style.

All that I have said has been on the purely practical level and addressed to the very youthful student, who in most cases is as yet no student at all. And all of it applies equally well to reading, to getting even familiar present-day thought from the printed page. But the elementary student has needs beyond familiar and present-day thought. He cannot read with pleasure and freedom even the carefully selected English classics that are set for him in the secondary schools unless through his Latin he has gotten an initiation into Roman and Greek ideas. Up to this very century English literature has been produced by people who were trained in classical ideas, or who, not being so trained, at least lived their lives in a society familiar with these. The student of English if devoid of Latin and Greek must pick and choose his reading with great care if he would maintain his interest for long. Unless he confine himself to the *Saturday Evening Post* and the journal of his trade he

will many times feel himself a stranger where the reader with even little Latin and less Greek will feel at home. He will find whole periods of English prose impossible and much of English verse beyond his imaginative reach. He must confine himself to the contemporaneous, and often suffer the feeling of detachment even there. He is debarred from real intellectual sympathy with no inconsiderable portion of nineteenth-century prose and verse—to mention only the more familiar names, with portions of Longfellow, Lowell, and Emerson, the Arnolds, the Brownings, the Morris', Landor, Keats, Shelley, Byron, Tennyson, Wordsworth, Macaulay, Newman, George Eliot, Ruskin, Rossetti, Pater, and even Tom Moore. Of course this catalogue would grow very rapidly if he tried to extend his reading backward into the eighteenth, seventeenth, and sixteenth centuries. No fewer than one hundred and twenty-five English poets and prose writers, including most of the great names, require mention in such books as Gayley's *Classic Myths in English Literature*. It is not the large number of direct allusions to the classics, however, that makes the trouble. The difficulty lies deeper. One may work assiduously with reference books and may find in them many useful facts. But when the proper names are missing and phrases are encountered that lie one or two removes from plain statement, enjoyment must cease for the student who has no part in that literary inheritance which classical culture has bequeathed. To such a one, even Lowell's prose will be full of mysterious subtleties and dark hints that are untraceable, and consequently offensive to the ignorant. Anybody may learn a textbook statement about John Milton's English prose and have it ready for examination; but like most things learned for examination it may as well be forgotten the next day by those who cannot read Milton's English prose itself and get meaning out of it. The textbook of English literary history must be taken on faith by one who cannot verify even the statements which hurl themselves at him in the coarse print, to say nothing of the fine print and the footnotes. What real perception of the truth about the nature of the influences that are vaguely called classical and pseudo-classical can the Latinless student acquire? Yet these influences have been always present and at times they have dominated whole periods. The fact is that historical criticism may as well be abandoned by the student of English who can have no first-

hand contact with the Latin writers that are said to have influenced English writers. Critical terms are baneful things when employed inaccurately. As for the scholar's work in tracing the origins of literary forms and species, that is of course out of the question. Even the casual reader of English literary history comes not infrequently upon the names of Cicero, Vergil, Horace, Ovid, Terence, Plautus, Homer, and Theocritus—and little good it does him. Without a minimum (which I dare not specify) of reading in Latin and Greek, not much reliance can be placed upon the use of translations by the English student, if trustworthy conclusions are expected. Imaginative sympathy will accomplish wonders, but imaginative sympathy must have at least a slight foundation on which to build.

Aesthetic criticism is not a permanent refuge. No wonder that aesthetic criticism has gradually degenerated into mere personal opinion. The only possible step left is that already taken by some—to break utterly with the past, even with the very recent past, and to renounce and denounce all English writers whom we find not agreeable to our modernism. The penalty that we shall pay for all this is already visible in the shallowness and whimsicality of much of our English instruction. The future of real English study is bound up with that of the other languages and especially Latin and Greek. The real issue is not between ancient and modern languages, nor between English and other modern languages. It is between serious language-study and no worthy language-study at all—not even in English. When that issue is plainly discerned the reaction may be expected. Meanwhile the preservation of standards in the English work itself imposes upon English teachers everywhere the duty of promoting classical studies as a matter of self-interest.

MUST THE CLASSICS GO?¹

Is classical training necessary in liberal education? To appreciate this question we must first know what education means. Every man is born into this world ignorant both of himself and his surroundings, but to act his part so as to reach

¹ Andrew F. West. *North American Review.* 138:151-62. February, 1884.

success and happiness needs to understand them both. Therefore, he must learn; and having to learn, must be educated. This will involve two processes:

1. The development of man's power to master himself and circumstances, by training every capacity to its highest energy,—discipline. 2. Communication of the most valuable knowledge,—information. Both are necessary. Discipline precedes information, because power precedes acquisition. Information completes discipline by yielding actual results in the world. In a word, discipline gives power to acquire information, and the total result is culture.

The two great instruments of educational discipline and information have hitherto been mathematics and language, leading to physical, intellectual, and social sciences, and these again culminating in a philosophy or study of first principles of all things. On this basis our college education has been built. None propose excluding mathematics. Few question the need of studying language in some form. But when the classical languages are proposed as essential to liberal education, objections arise and pronounced attacks are made. I propose merely three things:

- I. To enumerate the objectors and answer their objections.
- II. To state the positive argument for classical training.
- III. To state the reasons for retaining Greek as well as Latin.

I. The objectors and their objections. These are:

I. Men of active rather than contemplative temperament. They care chiefly for what prepares immediately for some specific calling, and are so absorbed in civil and commercial activities that they value only what bears obviously in these lines. John Stuart Mill has well shown the weakness of this position:—

"Experience proves that there is no one study or pursuit which, practised to the exclusion of all others, does not narrow and pervert the mind; breeding in it a class of prejudices special to that pursuit, besides a general prejudice common to all narrow specialities against large views from an incapacity to take in and appreciate the grounds of them. We need to know more than the one thing that is to be our principal occupation. This should be known as well as it can be known, but we should also acquire a clear general knowledge of the leading truths of all the great subjects of human interest."

2. Those who have never studied the classics. Many are college graduates. But their objection, if good, is good against any study they may have failed to appreciate from want of

proper teaching, of application, or of capacity. Herbert Spencer, a pronounced enemy of the classics, does not profess to read them except in translations. In this respect, many college men resemble Mr. Spencer.

3. Those who are imbued with the money-making spirit of the age. These, if they believed that studying Greek and Latin was the road of wealth, would all worship classical culture. But to-day the obvious, the "effective," the "realistic," the perversely vulgar, nursed on money-worship and covered skin-deep with affected cultivation, is too apt to crowd out the thoughtful and refined, and smother to death the heroic. Neither the hostility nor the approbation of this element counts for anything, because wholly ignorant and selfish.

4. Those who dislike classical studies because of distaste for any severe training, and a corresponding relish for lighter arts and accomplishments. They want culture only as far as it is immediately enjoyable. They desire results without the process, and so would resist thorough training in anything. Hence they answer themselves.

5. Those who believe literature necessary, but think modern languages should be substituted, as being genuine literature, and a necessary part of modern life. But to study modern languages we do not need to displace the classics. The trouble here is not the difficulty of making place for an extensive language course, but the prevalence of bungling methods of teaching, and the excessive time wasted on elementary mathematics, especially arithmetic, in so many schools. No such trouble exists in Germany. There, only one-sixth of the time, at the most, goes to mathematics, while to language even the *Realschulen*, or scientific schools, give two-sixths, and the *Gymnasia* four-sixths of their time. If, then, there is room for both, why not teach both? Suppose, however, we have to make the choice. The reasons for retaining the classics would be most cogent.

First. Because they are immeasurably superior to modern languages as means of discipline. Their structure is regular and highly complex. Modern languages do not contain material out of which to construct a logical grammar like theirs. What does English, French, or German grammar amount to? Simply *débris* of the classical languages, mixed with barbaric elements.

Second. Even if modern languages equaled the classics in

structure, they would be less likely to be used consistently for discipline. So much time necessarily goes to mastering pronunciation and acquiring merely facility of use, which necessitates only inferior mental effort, that this is often mistaken for mastery of the language. Furthermore, modern languages are too near our own modes of thinking to help us enlarge our knowledge in kind by entering widely different fields of thought, as we need to do.

Third. No modern languages have yet stood the great test of permanence which the classics have now endured for more than twenty centuries. Only a dozen generations have read Shakespeare. But Homer has already led the way to literary immortality for a hundred generations, with Plato, Virgil, and Horace not far behind.

Fourth. Modern languages, just because modern, are growing, and hence ever changing. This unfits them to be a permanent basis for culture.

6. Some advocates of physical science. Their objection is that science (meaning physical science) furnishes better discipline and information than the classics or anything else. Suppose it does. Must we study only physical science? Is there no room for any other training? May not classical training be scientific too? If correct, must it not be scientific?

But this objection is composite. Let us examine its parts; they are as clearly stated in Herbert Spencer's book, "Education," as anywhere.

"But now mark that, while for the training of mere memory, science is as good as, if not better than, language, it has an immense superiority in the kind of memory it cultivates. . . . Language establishes 'connections of ideas' based upon facts 'in a great measure accidental,' but science upon facts 'mostly necessary.' Though words and their meanings have relations 'in some sense natural'; yet since 'in the acquisition of languages as ordinarily carried on, these natural relations between words and their meanings are not habitually traced nor the laws regulating them explained,' it must be admitted that they are commonly learned as fortuitous relations. On the other hand, the relations presented by science are causal relations, and, when properly taught, are understood as such. Language 'exercises memory only, the other exercises both memory and understanding.' "

What greater error could be written? Examine it: science is superior in "the kind of memory it cultivates,"—that is, causal memory. Is there no causal memory in learning the structure of the Greek verb, the "build" of complex etymology, the orderly logic of syntax? Can it avoid being causal? Are there not laws of discourse, necessities in order and display of thought?

Is antique civilization—the one world-wide civilization of history, all whose features are in its literature, whose rise, organic growth, decay, and death, run in long lines for centuries, to be learned by rote?

But Mr. Spencer's contrast is made out in unfair language. It is not allowable to draw inferences, as if from premises of equal value, by phrasing things in this way, "the acquisition of languages, as ordinarily carried on," and then, "the relations which science presents are casual relations, and, when properly taught, are understood as such." Of course they are, and so are they in language, "when properly taught." His next objection—that science better cultivates the judgment—is of the same nature as his remarks on memory. He fails to see that classical study deals not merely with words, but with things, with a vast body of remarkable fundamental phenomena, and hence the judgment must be highly exercised.

Mr. Spencer next insists that science is best for moral training.

"The learning of languages tends, if anything, to increase the already undue respect for authority. . . . By the pupil, the teacher's or grammar's dicta are received as unquestionable. His constant attitude of mind is that of submission to dogmatic teaching. And a necessary result is to accept without inquiry whatever is established. Quite opposite is the frank, independent attitude of mind generated by the cultivation of science."

This is simple quibbling. Apply it to any science, say chemistry, and you could not require a student to "submit" to the "dogmatic teaching" that inculcates authoritatively (though only provisionally) its symbols, atomic weights, formulæ, specific gravities, and entire stock-knowledge. So in history, in teaching events and dates. So in arithmetic, numbers and their relations must first be learned arbitrarily or not learned at all. So in teaching a child the alphabet or even his own name.

But this is self-destructive also, as already hinted. All teaching must be instilled dogmatically at first, and, unless the pupil accepts it, no progress of any sort is possible. Now, in the classics, "when properly taught," and in all genuine teaching, this dogmatic communication must be received, but received provisionally as a basis for further investigations, to be verified or disproved, as the pupil's experience and discerning powers increase. What, then, becomes of Mr. Spencer's argument for scientific education? Science, to be taught, must be "dogmatic" in its beginnings, or else becomes unteachable, and must "go."

Mr. Spencer lastly claims transcendent value for science against the classics as "information." But is physical science the only science? Is not man, is not humanity full of scientific phenomena? Is it not man's interest to know himself, in order to become what he ought to be, more than to know or do anything else? Are not his thoughts the expression of himself, and language the outside, of which all human thought is the inside? In this light, language is as worthy of scientific study as external nature.

7. Those who have suffered from erroneous methods of teaching. Here is the strongest source of attack. A great field is occupied by teachers mostly unacquainted with the art of teaching. In mathematics this difficulty is less troublesome. Everything there is "exactly right" or "exactly wrong." Method, the key to all education, lies on the surface and is simple rigorous deduction, constantly asserting itself and revenging its violations immediately. It is therefore easily acquired, and hence good elementary mathematical teachers are numerous and commercially cheap. Not so in classics. Here we encounter a grammar the most perfect yet discovered, constructed from languages rich to completeness in a vast variety of inflectional forms, with vocabularies where every word, even every word-element, indicates a distinct thought, with a syntax articulated to every imaginable kind and form of thinking; we meet a literature embracing acknowledged models in every style, and stored with the wisdom of a great civilization now passed away, but on which we stand. Method does not lie on the surface here. It must be hunted out with great patience, and needs thorough philosophical powers, first to discover, and next to apply it in teaching. Hence, good classical teachers are rare, and consequently expensive. Here the financial necessities of schools come in, and secure cheap teachers who, of course, do cheap teaching. Ignorant of the *rationale* of their subject, their pupils become still more so, and plod drearily along or else evade their tasks, receiving a minimum of benefit outweighed by a maximum of mental injury. Hence, many array themselves against the classics. Their hatred of the caricature is just; their enmity to the culture itself is deplorable.

II. The positive argument for classical training:

Every man's entire life is occupied with one continuous process of thought, of which the simplest, easiest, and one universal

instrument is language. At the basis of knowledge lies the fact that we think of things. What we think is thought, and the expression of thought is language. If our thought tallies exactly with the thing thought of, we have an exactly correct thought, and if expression tallies with thought we have an exactly correct expression. Things underlie thought; thought underlies language. Here is the heart of the subject. Only as language and thought coincide, can knowledge itself be communicated and preserved; while so long as they are equivalent, language is as good as thought, just as a sound paper currency is as good as the gold it represents.

What does all this necessitate in education? Not teaching all languages. This is practically impossible. It therefore involves a selection of those best suited to accomplish the processes of education,—discipline and information. If, then, we can discover which languages these are, we must adopt them as the basis of all thorough literary education.

For educational purposes we make two classes, a man's native tongue and foreign languages. The first we must know, of course, as it is our chief means of intercourse. But we need more, both to understand English itself and enlarge our range of knowledge and so obtain completeness of power. Hence we need foreign languages. These are of two sorts, ancient and modern. From the first class all are prepared to rule out Oriental languages. What remains? Latin and Greek, the two fundamental languages of European culture wherever it has spread. From the second we rule out as unessential all except French and German. I firmly believe we can teach all four,—Latin, Greek, French, German,—with English as well, under any well-ordered system, and if we could not, modern languages might easily be acquired outside of our schools.

However, I ground the claim of the classical languages to a preëminent place on their immense superiority over all other languages, living or dead, as means of mental discipline. Let us hear Mr. Mill's argument for this:—

"Even as mere languages, no modern European language is so valuable a discipline to the intellect as those of Greece and Rome, on account of their very regular and complicated structure. Consider for a moment what grammar is. It is the most elementary part of logic. It is the beginning of the analysis of the thinking process. The principles and rules of grammar are the means by which the forms of language are made to correspond with the universal forms of thought. The distinctions between the various parts of speech, between the cases of nouns, the modes and tenses of verbs, the functions of participles, are distinctions in

thought, not merely in words. Single nouns and verbs express objects and events, many of which can be cognized by the senses; but the modes of putting nouns and verbs together, express the relations of objects and events, which can be cognized only by the intellect; and each different mode corresponds to a different relation. The structure of every sentence is a lesson in logic. The various rules of syntax oblige us to distinguish between the subject and predicate of a proposition, between the agent, the action, and the thing acted upon; to mark when an idea is intended to modify a quality, or merely to unite with some other idea; what assertions are categorical, what only conditional; whether the intention is to express similarity or contrast, to make a plurality of assertions conjunctively or disjunctively; what portions of a sentence, though grammatically complete within themselves, are mere members or subordinate parts of the assertion made by the entire sentence. Such things form the subject matter of universal grammar; and the languages which teach it best are those which have the most definite rules, and which provide distinct forms for the greatest number of distinctions in thought, so that if we fail to attend precisely and accurately to any of these we cannot avoid committing a solecism in language. In these qualities the classical languages have an incomparable superiority over every modern language, and over all languages, dead or living, which have a literature worth being generally studied."

So, too, in their value as literature. Mr. Mill continues:—

"But the superiority of the literature, itself, for the purposes of education, is still more marked and decisive. Even in the substantial value of the matter of which it is the vehicle, it is very far from having been superseded. The discoveries of the ancients in science have been greatly surpassed, and as much of them as is still valuable loses nothing by being incorporated in modern treatises; but what does not so well admit of being transferred bodily, and has been very imperfectly carried off, even in piecemeal, is the treasure which they accumulated of what may be called the wisdom of life; the rich store of experience of human nature and conduct, which the acute and observing minds of those ages, aided in their observations by the greater simplicity of manners and life, consigned to their writings, and most of which retains all its value. Their writings are replete with remarks and maxims of singular good sense and penetration, applicable both to political and to private life; and the actual truths we find in them are even surpassed in value by the encouragement and help they give us in the pursuit of truth.

"Human invention has never produced anything so valuable, in the way both of stimulation and of discipline, to the inquiring intellect, as the dialectics of the ancients, of which many of the works of Aristotle illustrate the theory and those of Plato exhibit the practice. No modern writings come near to these in teaching, both by precept and example, the way to investigate truth on those subjects, so vastly important to us, which remain matters of controversy from the difficulty or impossibility of bringing them to a directly experimental test. To question all things; never to turn away from any difficulty; to accept no doctrine, either from ourselves or from other people, without a rigid scrutiny by negative criticism, letting no fallacy or incoherence or confusion of thought slip by unperceived; above all, to insist upon having the meaning of a word clearly understood before using it, and the meaning of a proposition before assenting to it; these are the lessons we learn from the ancient dialecticians. With all this vigorous management of the negative element, they inspire no skepticism about the reality of truth or indifference to its pursuit. The noblest enthusiasm, both for the search after truth and for applying it to its highest uses, pervades these writers, Aristotle no less than Plato, though Plato has incomparably the greater power of imparting those feelings to others. In cultivating, therefore, the ancient languages as our best literary education, we are all the while laying an admirable foundation for ethical and philosophical culture.

"In purely literary excellence, in perfection of form, the preëminence of the ancients is not disputed. In every department which they attempted

—and they attempted almost all—their composition, like their sculpture, has been to the greatest modern artists an example to be looked up to with hopeless admiration, but of inappreciable value as a light on high guiding their own endeavors.”

Has not Mr. Mill covered the whole case?

III. The reasons for retaining Greek as well as Latin:—

1. There is time to teach both without injuring other studies.

This has been abundantly proved in the Prussian gymnasia, or classical schools. Latin and Greek form the central core of instruction, occupying half their entire time. They also teach the Christian religion, German, French, history, geography, arithmetic, algebra, plane and solid geometry, plane trigonometry, natural history, physics, writing, drawing, music, gymnastics. Where do they save time for this? Mainly in mathematics and physical science, which receive jointly less than half the time given Latin and Greek, or but a trifle more than is given Greek alone.

We should imitate the German example. First, by lessening the excessive time devoted to such study, for example, as arithmetic. In some States it has received over half the entire school-time in certain years. Why should mathematics, either in general or in particular, receive three times the attention it receives in Germany? Second, we should teach Greek better, both before and in college. Here time is saved by really using it. Our trouble is not too much Greek, but too much badly taught Greek.

2. Two important languages are better than one. Especially is this true in Latin and Greek, whose differences are even more remarkable than their resemblances.

3. While these differences give Latin a directer connection with our civilization, yet Greek offers a finer instrument for personal culture. Latin is the mother of modern tongues, the language of law, history, empire, practical energy, collective movements of men. But Greek is the mother-tongue of pure thought, the perfect instrument of human reason. The inexhaustible source for deriving the newest scientific terms to record the latest advances of thought in other languages, it yet never seeks to borrow for itself. It is subtler and more exact than Latin, more distinct in separate forms, more complex in masses, and more intimate in its mental attitude.

4. The Greek spirit, best studied at its original sources, is distinctively the great incentive to high creative effort in art.

Antique sculpture and architecture—indispensable to art-students to-day—were its early children. Homer was its first poet, and his spell has worked in every world-renowned epic since. Its light was hidden in the Dark Ages, but when the Reformation unlocked man's conscience, the Florentine Greeks unlocked his intellect. Canova, Leonardo da Vinci, Raphael, Michael Angelo,—these were but Greeks late born. Greek rhythms rule modern music. Read the scores of Palestrina, any fugue of Bach, or Beethoven's symphonies. Read Wagner's great letter on "The Music of the Future." All are Greek throughout.

5. It is the truly scientific spirit. Not that the Greeks observed so many facts, but that they taught the world how to think. Huxley to-day vindicates Aristotle's scientific acuteness. Agassiz has shown that he also observed important facts about Mediterranean fishes, and, though the fishes remained abundant, the facts were only brought to light in modern times by consulting Aristotle's work. The facts were the same; the observers were not Aristotles. Passing these *minutiæ*, look at our standard scientific conceptions: "ideas," "method," "theory," "practice," "hypothesis," "energy," "atoms," and the nomenclature of science,—all essentially Greek. Examine conflicting schools of thought. All have Greek prototypes. Men to-day are naturally—what the Greeks first were historically,—stoics and epicureans, dogmatists and skeptics, materialists and idealists, agnostics and theists, and battle in the endless war of ideas bequeathed from their Greek ancestors. The stream of history is one. Who shall divide it?

6. Lastly, Latin itself is injured by separating it from Greek. Withdrawing Greek means crippling Latin. This helps to disintegrate classical culture, and so disastrously affects liberal education. As to the injury done Latin. This follows from the relations of the two languages, but I pass this and again appeal to the invaluable experience of Germany. The studies of the Gymnasia have been already stated. Alongside of this stands the Realschule, whose general make-up is the same, except that, though Latin is retained, Greek is dropped, English and chemistry added, and mathematics and science increased one-half. In revised plans of instruction issued in 1882 for secondary schools, by the Ministry of Education, and containing criticisms on the past twenty-five years' experience, these comments occur: "In the Realschulen the result from the Latin

Instruction by no means corresponds either with the amount of time devoted to it or to the importance assigned this instruction in the general plan of these institutions." This arises from the small number of hours given Latin, and from the excess of natural science which has proved "decidedly disadvantageous." No such complaints arise about gymnasial teaching either of Latin or science. Wherein does the Realschule fail? Just where it differs from the Gymnasia—that is, in the absence of Greek and consequent excess of science. "The main point," says the "Opinion" of the University of Berlin, "is that the instruction given in the Realschule lacks a central point; hence the unsteadiness in its system of teaching. . . . In a word, it has not been possible to find an equivalent for the (two) classical languages as a center of instruction."

As to the injury done to liberal education. To prove this I take the best test in the world,—comprehensive educational experience of undoubted authority. In 1870 the Prussian Ministry of Education determined to try the experiment of granting university privileges to Realschulen graduates alongside of those coming from Gymnasia. After over ten years of such trial, the Philosophical Faculty of the University of Berlin has recorded its judgment on the matter in an "Opinion" addressed to the Ministry of Education. This is the central faculty of the university, including all departments except Law, Medicine, and Theology. It numbers over one hundred instructors, and provides about two hundred courses of lectures. It enrolls such names as Helmholtz the physicist, Kirchhoff in spectrum analysis, Hofmann in chemistry, Ranke and Droysen in history, Mommsen and Curtius in the classics, and Zeller in philosophical criticism. If we desired a supreme court of culture to decide the classical question, to what better tribunal could we appeal than this?—the central faculty of the most illustrious university of the best educated nation in the world. Its judgment, always weighty, is here simply irresistible, because based upon careful investigation, and unanimous.

The "Opinion" rests upon the testimony of those instructors who have taught Realschule and Gymnasia graduates together. These are the professors of mathematics, astronomy, chemistry, descriptive natural science, philosophy, economics, statistics, and modern languages. Their testimony, detailed with great clearness, is strongly adverse to allowing Realschule graduates a

continuance of university privileges. Many grave evils due to their admission are enumerated, and the Faculty expresses the conviction that, unless Prussia is ready to surrender her historic university system, "it is doubly hazardous" to shut their eyes to causes that, unchecked, will bring about this deplorable result. The essence of their judgment is in these words:—

"The preparatory education acquired in Realschulen is, taken altogether, inferior to that guaranteed by the Gymnasia." This is for many reasons, "but above all, because the ideality of the scientific sense, interest in learning not dependent on nor limited by practical aims, but ministering to the liberal education of the mind as such, the many-sided and widely extended exercise of the thinking power, and an acquaintance with the classical bases of our civilization can be satisfactorily cultivated only in our institutions of classical learning." Such is the strongest plea yet made for classical education in all its integrity. Is it sufficient? If not, what can be?

Greek need not go. Let it remain. Rather let it begin to come. It was born in the morning of history. Mythology fabled that its heroes were the children of immortals, and the records of humanity promise to confirm that claim. It schooled antiquity; it has been the historic safeguard for freedom of thought; it awakened the modern mind; it contains the most precious literary treasures of the race. Its corporeal form—the ancient civilization—has perished. Its material works of art, of priceless value, survive only in the crumbling column, the ruined temple, or the statue insecurely housed in some museum against Vandals of future time. But its best monument is its literature, multiplied a thousand-fold by the printer's art and imbedded in succeeding civilized thought. This still remains to challenge mankind in "charmed accents." In the pages of its texts, saved by centuries of diligence, the scholar by his quiet lamp reads back, through long perspectives of perfect thought, to the very beginnings of things intellectual. He gains a viewpoint where all lines of his intellectual being center and whence they broadly radiate. He sees the past sweeping on through the present and flowing widely into the far future. He sees that humanity, both individually and in the mass, is thus always one, and its generations, separate in time, united in nature; and so, instead of studying Greek because it is Greek, he studies it to understand himself.

THE MEASUREMENTS OF EFFECTS OF LATIN
ON ENGLISH VOCABULARY OF HIGH
SCHOOL STUDENTS IN COM-
MERCIAL COURSES¹

In our own country today, even among the educated, only too few recognize the importance of the Latin element in the English vocabulary. Rarely do we find the case for Latin stated more forcibly than in the words of Prof. Page, of Dartmouth College.²

As a matter of fact, the extent to which our scientific words are taken from the Latin may be seen at a glance by quoting from well-known books in science such statements as the following: "The aqueous solution has a neutral reaction;"³ and again: "This question of the influence of the solvent on the molecular weight of the dissolved substance is one of practical importance."⁴

That the vocabulary of commerce has been taken from the Latin nearly to as great a degree as the vocabulary of science is evident if one will merely read at random a page or two of any textbook in commercial geography, commerical law, or history of commerce. Hence, we are not surprised to find the following statement in the *Century Dictionary*: "The vocabulary of literature and commerce contains a majority of words of foreign origin, chiefly Latin or Greek."⁵

The inference, therefore, seems to be clear, that a commerical student, unless he is to be seriously handicapt in the struggle of life thru ignorance of the meaning and use of English words of Latin origin, which form so large a part of the vocabulary of commerce, ought to be thoroly grounded in the Latin language.

Thus it happens that in the Dorchester High School not only college preparatory and scientific pupils study Latin, but commercial students as well. In fact, during the present year there are seven sections of commercial or vocational Latin, numbering in all nearly 275 students.

¹ Albert S. Perkins, *Educational Review*, 52:501-6. December, 1916.

² Ninth Annual Bulletin of the Classical Association of New England, p. 12. "If the bone and sinew of the English language are Anglo-Saxon, the brain of it is Latin and Greek. Both the scientifically exact statement of any but the most elementary facts, and the expression of all abstract thought, in English, depend mainly upon words of classical origin."

³ Roscoe and Schorlemmer, Vol. 2, p. 377.

⁴ Walker, *Introduction to physical chemistry*, p. 194.

⁵ Vol. III, p. 1932, quoted from G. F. Marsh, *Lectures in the English language*, XXVIII.

The circumstances which led to the placing of Latin in the commercial curriculum, together with the actual working of the course, have been described at some length in two earlier papers.¹ On this occasion, therefore, I will merely state that the course in commercial Latin is for two years, and differs from the college preparatory Latin in making the study of English derivatives its chief aim. The pupils try to find in their English dictionaries as many derivatives as they can from all Latin roots they meet, both in the beginners' book and from the authors read; they apply prefixes and suffixes to the simple roots, and record in notebooks all derivates found, classified as to parts of speech, and defined. The meaning and use of the derivatives are made familiar by frequent drills and written exercises.

We are told that "our language has appropriated a full quarter of the Latin vocabulary, besides what is has gained by transferring Latin meanings to native words."² In this connection it is interesting to note that in the first year and a half of the commercial Latin course we have actually met over 700 Latin roots. In this number are included the words found in the beginners' book, and in short stories, and extracts from Caesar's *Gallic War* read during the half term of the second year. It is safe to say that there are at least 200 more roots in the selections from Ovid, Cicero and Vergil we shall read during the rest of the year. Of the roots already cataloged, only 63 yield less than five derivatives, while *facio* yields 173, not counting the words with the suffix "fy," *sto* yields 172, *plico* 155, *verto* 133, *capio* 132, the root *pend* and the verb *pono* 116 each, *fero* 110, *rego* 106, *specio* 89, *sono* 87, *modus* 84, *premo* 81, *video* 79, *creo* 75 and *mitto* 54. The great majority, however, of the Latin words yield from 10 to 20 derivatives each. The advantage of grouping so many derivatives about a common root is apparent to all. Furthermore, by what method could pupils more effectively fix the meanings of this large number of Latin roots than by constant translation of Latin into English, by frequent practice in reading at sight, and by recording in notebooks the new Latin words, and reciting from their notebooks the words they have had before, in the daily routine of the classroom?

The help afforded high school boys and girls in spelling

¹ Latin as a Practical Study, *Classical Journal*, Vol. VIII, No. 2, April, 1913, and Latin as a Vocational Study in the Commercial Course, *Ibid.*, Vol. X, No. 1, October, 1914.

² Greenough and Kittredge, *Words and their ways in English speech*, p. 106.

SELECTED ARTICLES

English words derived from the Latin may be illustrated by taking a few simple examples: thus, *annihilate*, from *ad*, to, and *nihil*, nothing; *delegate*, from *de*, down from, and *legatus*, representative; *equanimity*, from *equ* in *aequus*, even, level, and *animus*, mind; *efficient*, from *efficens*, the present participle of *efficio*, and this from *ex*, out of, and *facio*, to do—hence the two *f*'s and *ient*. Such examples might be multiplied almost indefinitely.

At the suggestion of Prof. Holmes, of the Department of Education of Harvard University, early in the year 1914 a series of measurements of Latin and non-Latin commercial pupils of equal ability was made by the English department of the Dorchester High School, to determine the added power in English vocabulary acquired by the study of Latin.¹ In five measurements two groups of pupils were selected, one in the second year of Latin, and the other in the second year of a modern language. Such pupils were chosen that each group had the same average mark in Latin, on the one hand, and modern language, on the other. In the selection of the two groups, the marks in English were also taken into account, with the result, in actual figures, that the non-Latin group in the two studies averaged 0.5 of 1 per cent the higher. To these five measurements is added a sixth, made in June, 1913. In selecting the two groups of pupils of equal ability for this measurement, the home room teacher took into account not only foreign language and English II, as was the case in measurements 1-5, but all studies the pupils had taken during the year. Altogether, 76 pupils were included in the six measurements.

The results were as follows:

		Averages
	Latin	Non-Latin
1. Spelling	82.5	72.6
2. Use of words in sentences.....	57.5	40.6
3. Definitions and parts of speech.....	69.5	33.3
4. Meaning of words and spelling	57.0	27.5
5. Excellence in vocabulary	36.0	6.8
June, 1913		
6. Meaning of words and spelling.....	65.3	12.3
	<u>6) 367.8</u>	<u>6) 193.1</u>
	<u>61.3</u>	<u>32.18</u>
Difference	<u>29.12</u>	

¹ *Classical Journal*, Vol. X, No. 1, October, 1914, p. 11.

In No. 5 the pupils wrote upon the subject, What I Like to Do Best. Moreover, since practically every second-year pupil could write at least passably on such a subject, it was decided to make the basis of comparison, not the average of the two groups, but the percentage of rating above the passing mark. Furthermore, in this vocabulary test, emphasis was laid, not merely upon words of Latin origin, but upon any words out of the ordinary, from whatsoever source. The wide difference in the results—36.0 per cent and 6.8 per cent—would seem to indicate that the work in commercial or vocational Latin gives the pupils the dictionary habit, the results of which extend far beyond the English derivatives actually studied.

In No. 6 the words were taken entirely from Franklin's *Autobiography* and from *Silas Marner*, which the pupils of both groups had just read, and were not of unusual difficulty, consisting of such words, for example, as asperity, promiscuous, mortuary. Yet, by referring to the results—65.3 per cent and 12.3 per cent—it will be seen that to the non-Latin group of commercial pupils such words were practically meaningless.

In this test among the seventeen non-Latin pupils the highest grade was 30 per cent, and five zeros were recorded. In the Latin group, on the other hand, the lowest mark was 30 per cent, while one pupil received 100 per cent, two 90 per cent, two 80 per cent, five 70 per cent, and only three below 50 per cent.

In view of such results with commercial pupils the question naturally suggests itself: Why should not the drill in derivatives be extended to the college preparatory classes? Judging from the reports of the investigation of Mr. Castle at Harvard as to the average college student's knowledge—or rather, ignorance—of English, this question is peculiarly apropos at the present time. As things are now, however, the secondary-school Latin teacher has little time, even if he has the inclination, to go beyond the bare requirements for admission to college. In that case, how would it do to have work in English derivatives required for admission to college—optional, perhaps, with advanced Latin composition? Such a requirement, very likely, would result in a shifting of emphasis in the teaching of high school Latin. Translation, it is hoped, would become less a bore, since it would serve as a means of fixing the meaning of the roots from which the English words are derived. Furthermore, the severity of the grind in syntax ought to be noticeably relaxed. In fact, would it be too much to expect that interest

might be stimulated all along the line? Furthermore, if such a shifting of emphasis were to be made, as the result of a new requirement in English derivatives, is there not good reason to hope that fewer high school pupils might fall by the way-side, in the first two years of the study of Latin, and that the average college freshman's grasp on English might be perceptibly strengthened? Would not such results be a consummation devoutly to be wished?

THE CLASSICS IN BRITISH EDUCATION¹

Two main points have to be discussed: first, the educational value of the classics; secondly, the possibility of making a place for them in the curriculum alongside of the other subjects which ought to form part of it.

The Classical Tradition

The Greek and Latin classes form a part, and historically the most important part, of what are commonly known as the Humanities. The Humanities comprise those subjects which deal with man in his relation to other human beings as a member of society, as contrasted with Natural Science, or the subjects which deal with the universe of nature and with man in his relation to it. On the one side we have history, literature, language, philosophy, law; on the other astronomy, geology, botany, chemistry, physics, mechanics, mathematics. It is waste of time to discuss which of these two main branches of education is the more important; for both are obviously necessary. What we have to consider is how to get the best out of both; how to equip the young mind with both portions of the armoury of life.

When the foundations of European education were laid, the classics and theology monopolized the whole field. There were no other languages or literatures known that were worth study, no histories comparable with those of the ancients, no philosophy or law but those of Greece and Rome, and but little science or mathematics. Modern education consequently was founded on the Bible and the classics, and a great tradition of classical

¹ The classics in British Education. Reconstruction Problems No. 21. British Ministry of Reconstruction. 1919.

education was firmly established in all civilized countries. Only gradually and comparatively lately have modern languages produced literatures in any sense comparable with those of Greece and Rome; only more lately has science come to take a prominent, perhaps a predominant, position in our daily life; only within the last generation or two has either subject been organised as an instrument for general education.

Hence it was through no perversity of our ancestors, but by the natural force of circumstances, that the classics have formed the main feature of the curriculum of all secondary schools that are more than half a century old, and that classics have a tradition in education which is matched by no other subject.¹ This fact, however, though it entitles them to respect, does not entitle them to continued exclusive possession now that other subjects have, so to speak, arrived at manhood. What we now have to seek is fair play for all, and see that in letting in the new do not lose valuable elements which only the old can give us.

The Claims of Other Subjects

Let us grant first ungrudgingly the claims of the other subjects. No reasonable person will deny that the study of natural science is of vital practical importance for the life of the modern world; that it is a stimulating and ennobling exercise of the mind; that every child should be shown something of the forces and the wonders of the world in which he lives, and should learn something of the rigorous methods employed in the pursuit of scientific knowledge. Equally true is it that modern history has a value, both practical and educational, which it had not attained a couple of centuries ago, and that the citizen of a modern state should know the outlines of the history of his own country, and at least the more recent history of the other great civilised nations with which we are in contact. One might go further, and say that one of the serious dangers which threaten our present polity is the ignorance of history on the part of the mass of the electorate, which deprives their political judgment of a much needed ballast. Modern languages, too, have educational possibilities which they never had before; not merely because we travel more and want to ask our way and

¹ This is emphatically stated in the recent Report of the Prime Minister's Committee on the position of Modern Languages in the Educational System of Great Britain.

order our dinner in foreign countries, but because there are great literatures in French, Italian, Spanish, German, Russian which it is good for us to read, and because it is important for us to comprehend the thoughts of peoples with whom our own life is ever more and more closely woven. Further, the purely utilitarian considerations are wholly on the side of the modern subjects. For the conduct of daily life, of commerce, of industry, of politics, we want modern science, modern languages, and modern (though not exclusively modern) history. But here we touch on the great peril of modern education, the danger lest in our pursuit of the immediately utilitarian we lose the vital spiritual element which is our ultimate goal.

Value of the Classics

It is because the classics contain elements of the highest spiritual and intellectual value which cannot be obtained elsewhere in equal force or equal intensity that the lover of education is bound to fight for their retention as one of the leading components of our national system. In the first place, Greek and Roman thought, Greek and Roman literature, Greek and Roman language, Greek and Roman history, lie at the foundations and enter inseparably into the structure of our own thought, literature, language and history. It is a tragic mistake to think of them as ancient or dead subjects. The history and thought of Greece and Rome are far nearer to us, far more real to us, far more modern, than the history and thought of the centuries from the second to the sixteenth of our era. They are still unexhausted springs of thought and inspiration to-day. In the crisis of the last four years, when men were forced back on the fundamentals of their nature, how many found comfort, wisdom, strength in the literature of Greece in the fifth and fourth centuries before Christ, in Aeschylus, in Thucydides, in Plato? And how often in the problems of our world-wide Empire do we find parallels and warnings in the history of the Roman Empire which we could find nowhere else?

It is difficult to bring home to those who have not thought about it the extent to which English language, literature, and thought are based upon Greece and Rome, and are unintelligible without them. Our philosophy is based upon Plato and Aristotle, and makes a leap thence to Hobbes and Locke; and Plato and Aristotle remain unsuperseded by Kant or Hegel, or even

by Nietzsche or James. The whole modern system of law (though less in England than in France) is based upon Roman law. Our imaginative literature is steeped in the literature of Greece and Rome; its forms, its subjects, its thoughts come straight thence as though no twenty or thirty centuries lay between. Our language is as much Latin as Saxon, and French, Italian and Spanish are but Latin modernised. Merely as a means to understanding modern languages and literatures a widely diffused knowledge of Greek and Latin is indispensable.

But, apart from the intimate association of classical culture with our own, its positive value is so great that any system of education which weakened our knowledge and appreciation of it would lower the standard and lessen the content of our own culture. It is the simple truth, unquestioned by those whose range of knowledge qualifies them to judge, that the literature of Greece is the finest in the world, though our own may come next to it. If any competent critic were drawing up a list of the great writers of the world, he could hardly help naming four or five Greeks before he named two of any other country. We should have to combine the greatest representatives of England, France, Italy, Spain and Germany to make a list which would match that which could be produced from Greece alone, without calling on the support which Rome could furnish. The imaginative intellect of the human race produced its finest flower in the Greek race, and the whole tone of our civilisation would be lowered if our knowledge of it—intimate only in the case of comparatively few in each generation, but conveyed by them to the general educated sense of the community in a way that would not be possible if Greek and Latin were languages as little known as Arabic or Persian—were sensibly weakened or confined to a handful of specialists.

A third aspect in which Greek and Latin are irreplaceable by modern studies is the purely linguistic one. It is not necessary to deprecate French and German in order to argue that Greek and Latin, as subjects of study, give certain elements of mental training which no modern language can give. It is not merely that Greek is incomparably beautiful, and possesses delicacies of style which are themselves a liberal education; for it may reasonably be argued that only the elect will appreciate them. More important is the fact that, while they convey thoughts which are entirely akin to our own methods of thinking, they

do so in a form of expression so different from ours that our minds are exercised to transmute the one into the other. Languages such as French or Italian are at once more easy and more difficult. They are more easy in that the forms of sentences and expressions are similar to our own, so that an approximate translation from one into the other involves little mental exertion; while on the other hand the *nuances* which differentiate words apparently identical with ours, and on which idiomatic knowledge of the language depends, are hardly to be comprehended by the young student, and almost necessitate a residence in the country. Translation from and into Greek and Latin is an admirable training in precision of thought and accuracy of expression. It requires first of all a clear comprehension of the sense of the passage to be translated, and next a selection of the correct words by which to convey that sense in another tongue. For those who have higher linguistic and stylistic gifts there are other benefits to be derived from the practice of translation, and much of the best and finest appreciation of language and literature is acquired by exercise in prose and verse composition; but this should be reserved for the few and not thrust upon all. But for all the practice of simple prose translation to and from Greek and Latin is at least as valuable an intellectual exercise as the study of algebra or geometry is for those who are not going to be expert mathematicians.

Social and Political Problems

A fourth consideration which must be touched on is the training which Greek and Latin give in social and political problems. Modern forms of law and government are derived from those of Greece and Rome. The problems of politics and of empire that confront us confronted Greece and Rome, were discussed by writers whose grasp of philosophic thought has never been surpassed, or were dealt with by the administrators of the one empire which in all history most resembles our own in scope and character. Moreover, these problems occurred then in more simple and less complex forms, and are so far removed from us in time that we can study them more clearly and dispassionately than those of our own country and time. Yet they are fundamentally the same. Many a classical scholar during these last four years must have thought again and again of historical parallels in Thucydides and Demosthenes, and must have had

recourse to the political wisdom of Plato and Aristotle. Many of our contemporary public men would deal none the less wisely with the problems of to-day if their minds were steeped in the wisdom and fortified by the knowledge which is to be found in the political and historical literature of Greece and Rome. There we find the trials of democracy and of empire, and there we watch the example of great men and acute thinkers dealing with the elements of the same problems as ourselves. It is a storehouse of experience from which we should be extremely foolish to cut ourselves off, and which, on the contrary, we should do our best to lay open to the classes into whose hands the control of our national destinies is now passing.

Use of Translations

It is not possible within the limits of a short pamphlet to dwell at length on the value of the classics, either as an instrument of intellectual training or as the depository of indispensable information and moral inspiration. Nor is it necessary. No reasonable advocate of natural science or of modern subjects denies the value of the classics, any more than the value of those subjects is denied by reasonable advocates of the classics. The question at issue between them is the possibility of finding room for them all in the curriculum, and the extent to which one or other must be sacrificed in order to make way for its competitors. But at this point it may be as well to touch briefly on an argument which is often used, namely, that the essence of classical culture can be sufficiently inbibed through the medium of translations. There is no need to deny the modicum of truth that resides in such a statement. Translations will convey much of the actual information contained in classical literature, and part at least of the benefits described under the fourth head of the above summary may be enjoyed by those who cannot read Greek or Latin. But it is only a part, and even this part loses something of its force and flavour. So far as it is true, it is true also of modern languages. One can learn the lessons of French and German history without reading the authorities for it in their own tongue. One can even make some acquaintance with the genius of Dante or Cervantes through translations. Yet no advocate of modern languages would accept this as an adequate training in modern European culture, even though translations from modern languages are

usually more adequate, and approach nearer to the tone and spirit of their originals than is possible in translations from Greek or Latin. And where Greek and Latin are strongest, in the expression of ideas, in the conveyance of spiritual inspiration and refreshment, in poetry, in philosophy, in the art of literary expression, translations are the least effective. The student who reads Plutarch or even Livy in a translation does not lose much; but it is only a poor and inadequate reflection that he will obtain from even the best translations of Homer and Æschylus, of Herodotus and Thucydides, of Plato and Aristotle, of Virgil and Horace and Tacitus. For all except the few, like Keats, whose kindred genius inspires them to divine the spirit which underlies the distorted form, a very great part of the gift which the classics have to bestow is lost.

Where the art of translation is really helpful is in accelerating the progress of the weaker scholar. If a student has once mastered the elements of Greek and Latin, his comprehension of the greater masters will be much assisted by the use of a competent version. Just as a beginner in Italian will make far more rapid and easy progress with Dante if he already knows Cary's translation, so there are many who could read Thucydides or Plato with profit and comprehension if they had Jowett's version at hand to help them over difficulties. Similarly, many a man who has learnt his classics at school will find it easy to keep up his acquaintance with them in later years if he is able to glance from time to time at an English version. A great service to the classics has been rendered by the production of the Loeb series of classical authors, in which the original and the translation face one another on opposite pages of volumes of convenient size.

The Discipline of Character

Before passing on to consider how the essential benefits of classical culture can best be preserved for English education, one further claim on their behalf cannot be passed over. It is a somewhat more contentious topic than those which have hitherto been dealt with, but there is no reason why it should not be stated with moderation. Experience has shown in the past that a classical education is an excellent discipline of character. It is to be observed first that a classical education does not mean, as controversialists so often represent it to mean, an education

confined to the study of Greek and Latin. A classical education, in a good school, has indeed its main staple in the study of these languages, but it includes as important subsidiaries a considerable amount of "divinity" (Bible study), of history (ancient and modern), and of mathematics, and a modicum (possibly a small one) of natural science and of modern languages. The proper proportions of these subjects is a legitimate topic of discussion, and will be referred to later; but it may be claimed for the classical education of the past that it trained a boy to be a useful member of society, to take an active part in the life of his school, and that the leaders of school and university activities were usually to be found among the classically trained boys. Testimony to this effect has been given by many men who had no *parti pris* in the matter, or whose prepossessions might have been expected to lead them to an opposite conclusion; and quite recently some interesting statistics have been published, as the result of a comprehensive inquiry in America. Evidence from this source is additionally valuable because it can be gleaned from a wider range than in England, and because it comes from a country where the classics are less securely entrenched in tradition, where prejudice is rather against the old ways than for them, and where new subjects and new experiments get a fair field and ample favour.

This evidence is contained in a volume by Dr. A. F. West, of Princeton University.¹ The main bulk of it is occupied by the testimony of several scores of leading men in American life—Presidents of the United States, men of business, scholars, lawyers, doctors, engineers, science professors, journalists, historians, and writers of various sorts. At the end are a few pages of statistics, which are striking even to those whose faith in the classics is most profound. The figures are based upon returns covering a very wide range of universities. These are some of the results:—

"The Secretary of the College Entrance Examination Board has tabulated the comparative records of the classical and the non-classical students who took the examinations of the Board in the three years 1914, 1915, and 1916. There were 21,103 candidates." *In the non-classical subjects* 2.95 per cent of the classical candidates obtained a rating of 90 to 100, and 2.05 per

¹ *Value of the Classics* (Princeton University Press, and H. Milford, London, 1917).

cent of the non-classical candidates; 17.31 per cent of the classical candidates obtained a rating of 75 to 89, and 12.31 per cent of the non-classical candidates.

"In all but one of the subjects taken by any large number of candidates the classical students show a marked superiority over the non-classical."

In reports from 19 high schools and academies and 17 colleges and universities, "students receiving High Honors at graduation were 18 per cent of all the classical students, but only 7.2 per cent of all the non-classical students. . . Students receiving Honors or Prizes for Debating, Speaking, or Essay-writing were 8.8 per cent of all the classical students, but only 3.5 per cent of all the non-classical students. . . Students winning Prizes or Honors for Scholarship in other than Classical Subjects were 13.5 per cent of all the classical students, but only 9.3 per cent of all the non-classical students." In the institutions from which these figures are drawn the non-classical students outnumber the classical by over 10 per cent, yet on every basis of comparison (and only a few have been quoted above) the classically trained men show the better record. It is not necessary to decry other subjects, which for many individuals are preferable and have their essential place in the community and in the educational curriculum; but for the all-round training of the citizen the claim of the classics to hold the premier place has not yet been shaken.

Relations With Other Subjects

If space permitted, it would be easy to collect much testimony from men of science, of business, or of commerce to the value of a broad humanistic training as a basis for work in quite other fields than the classics or literature themselves. But it is time to pass on to the further question, how is room to be found for the classics as well as for the other subjects which are pressing for an increased share in the curriculum; and what should be the relation of these subjects to one another?

On these points satisfactory progress has been made during the last few years towards a general basis of agreement. Two reports have been issued, containing an account of a series of conferences between representatives of all the principal subjects

¹ *Education, Scientific and Humane* (Murray, 1917, price 6d.), and *Education, Secondary and University* (Murray, 1919, price 1s.); Both prepared by Sir F. G. Kenyon on behalf of the societies concerned.

of secondary education.¹ On the one side was the Education Committee of the Conjoint Board of Scientific Societies, a federation of about sixty scientific organisations, headed by the Royal Society; on the other the Council for Humanistic Studies, a similar federation of the Classical, English, Geographical, Historical and Modern Language Associations and other bodies, headed by the British Academy. The results of the conferences showed a singularly harmonious effort to fashion a scheme of education which would give fair play to all subjects, and encourage the student to make the best use of his faculties.

A General Curriculum

The nature of this scheme is best indicated by quoting the following series of resolutions:—

1. The first object in education is the training of human beings in mind and character, as citizens of a free country, and any technical preparation of boys and girls for a particular profession, occupation, or work must be consistent with this principle.
2. In all schools in which education is normally continued up to or beyond the age of sixteen, and in other schools so far as circumstances permit, the curriculum up to about the age of sixteen should be general and not specialised; and in this curriculum there should be integrally represented English (language and literature), Languages and Literatures other than English, History, Geography, Mathematics, Natural Sciences, Art and Manual Training.
3. In the opinion of this Conference both natural science and literary subjects should be taught to all pupils below the age of sixteen.
4. In the case of students who stay at school beyond the age of sixteen specialisation should be gradual and not complete.
5. In many schools of the older type more time is needed for instruction in natural science; and this time can often be obtained by economy in the time allotted to classics, without detriment to the interests of classical education.
6. In many other schools more time is needed for instruction in languages, history and geography; and it is essential, in the interests of sound education, that this time be provided.

7. While it is probably impossible to provide instruction in both Latin and Greek in all Secondary Schools, provision should be made in every area for teaching in these subjects, so that every boy and girl who is qualified to profit from them shall have the opportunity of receiving adequate instruction in them.

No Early Specialisation

The root idea of these resolutions is obvious. It is that up to about the age of sixteen education should be general, and that this general education should introduce the pupil to all the principal branches of knowledge—to his own language, to other languages, ancient and modern, to history, to geography, to mathematics, to natural science, besides that manual training which is useful to all and the one congenial mode of self-expression to some. During this period the aptitudes of the pupil will be declaring themselves, and can be studied. At the end of this stage his progress will probably be tested by an examination (the "First School Examination" recognised by the Board of Education), success in which should be accepted as a sufficient qualification for entry into a university or to other courses of study. After this stage specialisation may begin. The pupil will devote more time to the subject for which he has most aptitude or which he intends to make his main pursuit at the university. But other subjects will not be wholly dropped, and some kind of a general education will be maintained up to the end of school life. Only at the university will specialisation become complete.

In this way every pupil has a chance of acquiring a broad outlook upon life. He is given the keys of many doors, and knows something of the treasures which he may expect to find behind them. Whatever line of life he may afterwards pursue, he has the possibility of sympathizing intelligently with the interests of others, and understanding the importance of whole classes of knowledge, even though his own knowledge of them is small. His mind is not narrowed and his interests limited by a premature and excessive specialisation.

The Provision of Opportunity

This matter of the *provision of opportunity* is of great importance. It is admirably expressed by a distinguished man

of science, Prof. W. Bateson, in the following words, which show a catholic sympathy with all branches of knowledge:—

"We recognise education in its two scientific aspects, as a selective agency, but equally as a provision of opportunity. In view, therefore, of the congenital diversity of the individual types, that provision should be as diverse and manifold as possible, and the very first essential in an adequate scheme of education is that to the minds of the young something of everything should be offered, some part of all the kinds of intellectual sustenance in which the minds of men have grown and rejoiced. That should be the ideal. Nothing of varied stimulus or attraction that can be offered should be withheld. So only will the young mind discover its aptitude and powers. This ideal education should bring all into contact with *beauty* as seen first in literature, ancient and modern, with the great models of art and the patterns of nobility of thought and of conduct; and no less should it show to all the *truth* of the natural world, the changeless systems of the universe, as revealed in astronomy or in chemistry, something too of the truth about life, what we animals really are, what our place and what our powers, a truth ungarbled whether by prudery or mysticism."

Making Room for Other Subjects

In order that a general education such as has been here outlined may be established, and that full provision of opportunity may be accorded in all directions, it is admitted that in most of the older secondary schools the time allotted to classics must be reduced. This is frankly accepted by many of the keenest advocates of the classics. Latin and Greek are unquestionably more difficult than most other subjects, because they are more wholly strange to the beginner; and consequently a fairly generous allotment of time must be given to them if any progress worth making is to be made. But it is possible to reduce greatly the details of grammar (especially the more exceptional details), to restrict composition (except the construction of simple sentences) to those who specialize in classics, to stimulate the reading of easy texts, and to assist progress by the aid of translations. In this way the pupils in general will have some of the interest and some of the linguistic training of the classics

¹ *Cambridge Essays on Education*, ed. A. C. Benson (Cambridge, 1917).
p. 132-3.

put before them. Those who show aptitude for the subject will be able to pursue it to its higher levels; while those who go no further will at least have been introduced to interesting portions of such authors as Homer, Herodotus, Caesar and Cicero, and will have some comprehension of ancient languages and ancient history.

No demand is now made that classics should receive unique privileges; but it is demanded that nothing should be done to weight the scales against those who have an aptitude for a form of education so effective, so wide-reaching, so rich in capacity for forming the character and training the intellect. This demand is made not in the interests of the classics (whatever that phrase may mean), but in the interests of the nation, which cannot afford to lose so valuable an element from its culture.

A generous rivalry between the different subjects is quite another thing. Each should strive to make good its claim to be the benefactor of the human species; and as each makes good its claim, so will it obtain its share in the curriculum. But to grant at once all that eager advocates of the newer subjects claim would defeat their own objects. As their wiser representatives admit, they have to perfect their methods, to train their teachers, to establish the traditions which classics admittedly already possess. The Minister of Education has himself recently laid stress on the need for *gradual* expansion on the part of the newer subjects:—

"It must always be remembered that the newer studies suffer under an initial disadvantage which it takes some little time to correct. Teachers have to be trained, methods have to be improved, text-books have to be written, a tradition has to be built up before a new study can acquire the educational value which belongs to any branch of discipline which has been perfected and refined by improvements continued over many generations. For this reason I doubt whether Science or Modern Languages would be in a position at once to make good use of all the school hours which their more extreme advocates demand for them. We cannot, in other words, leave altogether out of sight the existing qualifications of the men and women who are teaching in the schools, or beneficially correct the balance of studies in the curriculum of our schools unless we are prepared to give to every study only so much time as it can profitably use."¹

¹ Letter read at a meeting of the five Humanistic Associations, January 9, 1919.

Fair Play For Classics

What then is needed in order to bring about the result we desire? First, such modifications in the examinations for scholarships at the Universities as will remove the temptation to excessive specialisation at schools. Next, a willingness on the part of the friends of classics to make economies of time in order to allow room for other subjects. Thirdly, a willingness on the part of advocates of other subjects to allow fair play to classics. So far as the making of economies is concerned, a committee of the Classical Association is now sitting to consider how they can best be effected in the case of Greek. But there is another side to this question, which has not yet been touched on, and raises in an acute form the claim of fair play for classics. In the controversies with regard to classics the disputants have almost invariably had in mind the public schools in which classics are firmly and even predominantly established. But there is a far larger class of secondary schools in which classics lead a very precarious existence. In the municipal and other secondary schools throughout the country, in which an increasing proportion of the population will in future be educated, the proportions existing in the older schools are completely reversed. Science is here entrenched and protected by compulsion and encouraged by public opinion. Latin, and still more Greek, are regarded as ornamental and probably useless excrescences.

In schools such as these the need is to claim for the pupils who attend them an element of culture to which they are entitled and which they are in danger of losing. Greek and Latin being what we have seen them to be, the foundation and inspiration of all our modern culture, and possessing what we have seen them to possess, a good half of the finest literature of the world, they should not remain the special preserve of one social class in the community. The classics, and especially Greek, should be the possession, not of the social aristocracy of the country but of the intellectual aristocracy. There is no reason why this intellectual aristocracy should be confined to the comparatively wealthy. It

is for the working classes, now that they are rising to fuller power and more articulate expression, to claim their right of access to this mine of intellectual wealth.

The Claim of the Working Classes

Fortunately there are signs that they will do so. At a recent deputation to the President of the Board of Education,¹ Mr. A. Mansbridge, the founder and inspirer of that excellent movement, the Workers' Educational Association, used the following words:—

"Working people are displaying an increasing interest in such subjects as Greek Democracy and Greek Moral Political Thought. . . . It is not too much to say that there are to-day many working people in all parts of the country who associate the name of Greece with the cause of humanism, and who eagerly seize every opportunity of extending their acquaintance with classical civilisation." Of proposals which would confine the knowledge of Greek to the well-to-do he said, "That obviously would be an injustice which working men and women, developing as they are in appreciation of education, would not tolerate for one moment. . . . I should like to see a redistribution of the opportunities for classical studies. . . . I do not wish scholarship to be confined to those who are able to give their lives to it; I want men engaged in all occupations to have the opportunity of developing it. I hope the day may come when a working man may be able to enjoy Homer in the original, and excite no more comment than his enjoyment of Shakespeare does now. Why should it?"

This is no fantastic ideal, but one that comes well within the range of such a reconstruction of our national life as we are now contemplating. What is required is that in every educational area there should be facilities for the learning of Latin and Greek, and that boys and girls who show signs of linguistic capacity and literary taste should have these gifts encouraged. For those who have them it is no very great or hard matter to acquire such a knowledge of Greek as may enable them to enjoy the easier authors after a two years' course of study, and even the harder ones with the aid of a translation. A committee of

¹ On April 27, 1917. Reported in full in the *Proceedings of the Classical Association*, Vol. XV., p. 540.

the Classical Association has just been engaged in drafting such a course.

Modern intellectual civilisation owes its rise to the recovery of Greek literature at the Renaissance. It would be tragic if, at the moment when the nation has risen to the height of its great ordeal in virtue of its maintenance of those high spiritual ideals which ancient literature does so much to foster, it should put out of its life the source and mainspring of its intellectual inspiration. The classics are a heritage to be cherished, not to the exclusion of other worthy and necessary subjects, but as an essential element with them in the full culture on which a noble national life can be nurtured and maintained.

THE VALUE OF THE STUDY OF LATIN AND GREEK¹

In the gray dawn of history Parmenides, a Greek, wrote a philosophical poem which he divided into two parts. The first part was dedicated to truth, the second to opinion. No more fruitful division of human notions has ever been devised than this of the early Greek thinker.

A small realm in which matters are settled unalterably, where disputes can no longer rage, where we must conform to the facts and gain much by doing so, this small realm is that of the truth, for which "brows have ached and souls toiled and striven." It is so precious that even a counterfeit of it is valuable. Its faculty of settling disputes is such an economy that we delegate that power to men of all sorts, clothe them with a specious infallibility and say to them, "Decide, in order that delay and hesitation may cease. Better progress in the wrong direction than no progress at all. Better graft than anarchy." In this way we have doubtless enthroned more error than we have discovered truth, but the economy justifies the method in most cases.

An enormous realm in which affairs are not settled but in constant change, where disputes rage and the individual's gain is proportional to his vociferation, where every one who can do

¹ Prof. Lawrence W. Cole, Director of the School of Social and Home Service, University of Colorado. University of Colorado Bulletin. 14:9-15. September, 1914.

so must take more than he is entitled to, must "stake out" more land than he can possibly cultivate lest the turn of the tide wash much of it away, where one conforms chiefly to his own desires and the appeal is to "man's unconquerable soul"; this is the realm of opinion and many of the most important human concerns belong to this realm. Opinion, however, does two good things. It breeds first partisans, then experiments. *Credimus experto.*

Education being an important human concern, no question concerning it can finally escape either stage of this evolution from opinion to truth. Every item of educational opinion will first divide men into two parties. If the problem can be factored into its elements each elementary question can usually be promptly tested by experiment and from the result of such analytical experiments there is no escape. Their results are true.

If the problem can't be factored the partisans themselves become the experimenters. This is unfortunate, for a partisan is not likely to weigh all the evidence justly. There is, however, no escape from experimenting. Courses of study are framed in the light of the framers' opinions. If they are men in authority, even methods of teaching must conform to their rules, and all this continues until time brings a change in the school administration, for a partisan rarely changes his mind. We must admit, however, that as long as educators and the public hold opinions school instruction must be a series of wholesale, social experiments; wholesale in the sense that problems are not attacked by analysis or piecemeal, but that you must judge a method or a study by its total results or its statistical outcome; and too frequently no statistics are kept, not even the intellectual death rate.

The steps or stages from opinion to truth are, therefore, three:

- (a) Partisanship of a platform or theory;
- (b) Wholesale experiment with a possible statistical result;
- (c) Analytical experiment in which each factor is studied separately.

1. The partisans of Latin and Greek have urged that these subjects are excellent disciplines of a liberal education and a splendid preparation for professional and technical training.

The opposite party has claimed either that there is no such thing as discipline or that one study is quite as good as another for mental training. Therefore, no attention need be paid to

discipline; and for information, the classics should be read in translation.

In this state of opinion the only course possible is to examine the competence and credibility of the witnesses. If my sources of information are correct, Lord Kelvin,¹ Karl Pearson, John Stuart Mill, Matthew Arnold, Bryce, Lowell, Barrett Wendell, Professor Grandgent, Brunetière and Anatole France, all believe in the classics as a training for the scholar. I omit all who are professionally interested in Latin and Greek, even the great Jebb and Jowett.

Just as sincere partisans on the other side are Descartes, Herbert Spencer, David Starr Jordan, and Stanley Hall. Here I omit the names of persons professionally interested in some new subject to displace the classics.

So far as disinterested opinion goes, therefore, there is a clear balance in favor of the boy's studying Latin and Greek in high school as a preparation for the future work. Those who recommend such study are scholars of the first rank.

2. Relative to Greek and Latin, however, we have made a wholesale experiment. With the introduction of the newer studies and elective courses in high schools we changed from classical training and we may now compare the result of the new with the old. For the purpose of this comparison, let me quote professors Wendell and Grandgent. None are better observers and none have had better opportunity to compare the two conditions.

Professor Wendell² writes as follows:—

"It seems to me, as the newer educational notions have supplanted the elder at schools which fit boys for college, those boys prove, when they get to college, flabbier and flabbier in mind."

"A satisfactorily educated man distinguishes himself from an uneducated one chiefly because, for general purposes, his faculties are better under his control. An educated man, in short, when confronted with new or unexpected problems can generally use his wits better than an uneducated one. Here we are on purely practical ground. The simple question becomes one of plain fact, not of prejudice. What kind of education makes people most frequently efficient for general purposes?

¹ See Shorey, Paul. *The Case for the Classics..* The School Review. Volume XVIII, 1900.

² Wendell, Barrett. *Our National Superstition.* North Amer. Rev., Volume CLXXIX, 1904, page 388 ff.

Honestly answering this, though I am myself a professor of a radical and practical subject, I am bound to say that purely practical considerations go far to justify the old system of classics and mathematics in comparison with anything newer."

This is the verdict of a professor of English, after twenty years' observation of the "elective" and "no-classics" régime.

Professor Grandgent,¹ who has charge of Romance Languages and has had an equal opportunity to observe the experiment is more emphatic than Professor Wendell. He calls the present the "dark ages" of scholarship, and writes thus:—

"Another prevalent fallacy, which has found favor even in high quarters, is the belief that for the training of the young, one subject is just as good as another. This is surely on the face of it an amazing doctrine to promulgate: it runs counter to all traditional and, so far as I am aware, to all contemporary experience. One would think the burden of proof should rest on its confessors. Yet they have offered not a shred of evidence —nothing but bald assertion. And on the basis of this empty vociferation school programs and college admission requirements are overturned. Perhaps, our age has furnished no better example than this of its sheeplike sequacity. We, here present, are nearly all of us teachers, and as competent as anybody to testify in this case; and I venture to say there is not one among us who has not observed, in students who have pursued widely different studies, a corresponding difference in general aptitude. It does not stand to reason that algebra should develop the same faculties as free-hand drawing, or Greek the same as blacksmithing. Probably the greatest divergence in the educational value of studies is due to the varying degree to which they require concentration, judgment, observation, and imagination. Some occupations can be pursued with tolerable success while the mind is wandering; others, like arithmetic and algebra, demand close and constant attention. Some can be carried on by an almost mechanical process, others, like Greek and Latin, call for continual reasoning and the application of general principles to particular cases. Some exact little of the mind but much of the eye."

"The fallacy just defined is closely related to another which it has used to support: namely, the doctrine that all study must

¹ Grandgent, C. H. *The Dark Ages*. Pub. Mod. Lang. Assn. of Amer., Volume XXVIII, 1913.

be made agreeable to the student. More and more the difficult subjects have been replaced by easier ones, and these have been made easier yet by the extraction of obstacles and the invention of painless methods. Grammarless modern languages, delatinized Latin, simplified mathematics omit the very features that make study valuable. Predigested foods of all sorts have almost deprived our youth of the power to use their teeth."

Add to these observations the fact that many professors of physics and chemistry prefer that their students should not have studied those subjects in high school, but would rather they had studied Latin and Greek.

Again the Department of English of Harvard University has been importuned for years to set a requirement for admission called "Advanced English," which should be equivalent to the high-school training in Latin and Greek. This the professors have refused to do because no study of English could be made the equivalent of classical study as a *preparation for students of English*.

The University of California begs the high schools to offer Greek to prospective students of English because they too can find no substitute for it.

Physicians who have no knowledge of Greek urge medical students to elect that language for the sake of understanding medical and scientific terms.

May I add my own impressions to all this testimony? It is my duty to teach the elements of psychology to large classes of sophomores in college. Despite many simple experiments and the newer methods of instruction, the subject is still somewhat abstract. I can not transfix the mind on a dissecting needle and pass it around for inspection as one might a cockroach or a butterfly. Consequently, students find that the subject does not disclose its secrets without considerable study.

The difficulty, so far as I can define it, lies in this. Besides learning to see objects, the student must learn to make nice but definite discriminations, must form certain general notions, and must, above all things, learn to detect relations. Now analysis, generalization, and relational thinking are developed and trained above all things else by the study of Latin and Greek. For this reason, your classicist is always an educated man. He finds in psychology a subject both of training and information, and he promptly goes to the deeper levels of that information.

Others obtain as much information from the subject as their previous training and their industry permit.

One more wholesale experiment may be mentioned. The Germans, quite untroubled by our elective courses and disputes, demand six hours per week of Greek for six years, and almost twice as much Latin in their gymnasium courses. The Latin is required even in the real-gymnasia.¹

The collective experiments of twenty years with elective courses and the newer subjects of instruction have not produced as good results as the instruction of the period just preceding. Consequently, the elective course has been dropped everywhere, and especially in the high schools. Almost every claim made in its favor proved false. The evidence I have reviewed shows, I think, that high-school students would be immensely benefited by a return to the study of Latin and Greek. These studies were condemned for the sake of the elective course. That having failed disastrously, the classics should now be tried on their merits.

3. Is the claim true or false that Latin and Greek afford intellectual discipline? Not analytical experiments but group experiments have tried to answer this question, and with varying results. For centuries plain men and scholars believed in the existence of such a thing as intellectual discipline. They thought they observed the decay of mental powers when they were not used. The visual region of Laura Bridgeman's brain had within it millions of undeveloped cells. It seemed reasonable to suppose that the similar undeveloped cells to be found in all brains might be due in turn to the absence of stimuli, the lack of cultivation.

However, the first group-experiments designed to measure the effect of discipline and the amount of its transfer failed to find transfer. Hence transfer was denied and the existence of such a thing as discipline gravely doubted.

Soon the experiments were seized upon by writers on education and made to bolster up the doctrine of interest, or any other theory or fad in which the writers might believe.

Now we know that the wrong conclusion was drawn from the experiments. The conclusion should have been not that transfer does not occur, but that *the method used was too crude*

¹ Lexis, W. *History and Organisation of Public Education in the German Empire*. Berlin, 1904, page 56.

to detect it. Careful individual experiments have recently been made and Ebert and Meumann,¹ Coover and Angell,² Winch,³ Bennett,⁴ Fracker⁵ and others have found transfer of discipline in marked degree. The doctrine of "no-transfer" is exploded⁶ and if its former advocates do not admit the explosion openly they do so tacitly in their recent writings.

There is positive transfer, *i. e.*, increase of one mental ability by training another, and in some cases, negative transfer, or decrease in some ability due to long exercise of others, and this, I believe, was exactly the opinion held by sensible men before the cry of "no-transfer" was raised. Once it was raised it was used to bolster up the most extravagant claims of all sorts of educators. One teacher of education denied even the fact of training of special mental powers by their own exercise. It was all a beautiful example of loading the negative results of hasty group experiments with positive conclusions, for which "scientific accuracy" was claimed.

The claims of Latin and Greek rest so much on a belief in their disciplinary value that the "no-transfer" propaganda was almost the last nail in the coffin of the classics. The worst effect is that discipline has no longer been aimed at in high schools, by either teachers or pupils. The course of study has as often been a melange of novelties as a group of subjects whose mastery required industry. Little wonder that Professor Grandgent calls our educational present "The Dark Ages."

¹ Archiv. f. d. gesamte Psychologie. IV, 1904.

² Amer. J. of Psych. XVIII, 1907.

³ Winch, W. H. Brit. J. of Psych. II, 1908.

⁴ Bennett, C. J. Formal Discipline, N. Y. 1907.

⁵ Fracker, G. C. Psych. Rev. Monog. Supp. IX, 1907.

⁶ Recently British psychologists have renewed the attack on the problem and with refined mathematical methods. All but one of the investigators find a greater per cent of correlation than can be ascribed to chance or error. Moreover, the correlations arrange themselves in a hierarchy, thus giving evidence, the authors say, of a "common fund of energy" or general intelligence which may be exercised in a variety of types of mental work. This is a startling return to an old belief. Yet it must still be emphasized that neither the experimental method used in testing for correlation nor the mathematical treatment of the results is well enough established to justify its use as a foundation for educational dogma. To this opinion the British investigators subscribe. But if the method is still not adequately verified, what shall we say of the crude experiments of fifteen years ago? Their use suggests vividly the remark of Hodgson: "Whatever you are totally ignorant of assert to be the explanation of everything else." This is, of course, quackery in education, as it was in philosophy, but the quackery has worked too well. We surely need to discriminate between the educational mountebank and the expert in education. In the present state of our knowledge the latter is characterized by the fact that he, first of all, *avoids* doing great harm.

BRIEF EXCERPTS

All the available information shows that the classical generally surpass the non-classical students in school and college studies. *Andrew F. West, The Value of the Classics*, p. 17.

Of Latin derivation are from 60 to 75 per cent of all the words in an unabridged English dictionary. *Why the full Latin requirements should be kept*, p. 8.

It seems quite safe to predict that no culture will ever be considered broad and deep unless it rests upon an understanding and appreciation of the civilizations of Greece and Rome. *Nicholas Murray Butler, The Meaning of Education*, p. 173.

Latin still constitutes the most thoroughly ordered and synthesized body of knowledge in the modern world, and hence the best of all known studies for building an ordered mind. *W. H. P. Faunce, Practical Value of Latin*, p. 31.

The thorough investigation of the New Testament in its history and meaning must forever rest on a knowledge of the Greek language. *William D. McKenzie, Practical Value of Latin*, p. 16.

A sober reflection on the history of the ancient republics might put us on guard against many of the dangers to which we ourselves are exposed. *Irving Babbitt, Literature and the American College*, p. 171.

I am most thoroughly in favor of Classical studies, and my opinion is based not only upon my own experience but upon the general history of education. *John Grier Hibben, Practical Value of Latin*, p. 30.

So far as our experience has gone, we have not discovered a means for the development of intellectual maturity comparable with the study of Latin and Greek. *Rush Rhees, Practical Value of Latin*, p. 30.

The principal function of education, as it seems to many thinking people, is so to train the youth that they may find in their minds and in their tastes a perennial source of satisfaction and enjoyment. *Classical Weekly (editorial)* 3:121, Feb. 12, 1910.

Nothing but a tolerable familiarity with Latin roots can prevent stupid misuse of words derived from Latin. History and common sense combine to make Latin the only sound foundation of literary English. *Barrett Wendell, The Relation of Latin to Practical Life*, p. 30.

Latin and Greek are the sub-structure not only of most words we use, but that also classical literature contains the basic principles of philosophy, law, science, history, and, in short, of civilization itself. *Editorial, Buffalo Times*, July 12, 1920.

No student can go far in the study of any Romance language without a knowledge of Latin. There is very little Romance literature whose full flavor can be perceived and relished by the student who knows neither Latin nor Greek. *Caroline S. Sheldon, Outlook* 107:288 June 6, 1914.

Among the advocates of classical studies have been nearly all the great critics of the nineteenth century, from Goethe, Coleridge and Sainte-Beuve to Brunetière, Anatole France, Lemaitre, Faguet, Doumic, Lowell, and Arnold. *Paul Shorey, Atlantic Monthly* 119:799 June 1917.

For the mass of English speaking men, rare spirits excepted, the best use of English is not attained without knowing the sources whence our mother tongue draws its life. Nearly half if it is Latin. The better we know Latin, then, the better our use of English. *Dean Andrew F. West, The Value of the Classics*, p. 29.

A mastery of the literature and the history of the ancient world makes everyone fitter to excel than he would have been

without it, for it widens the horizon, it sets standards unlike our own, it sharpens the edge of critical discrimination, it suggests new lines of constructive thought. *James Bryce, Practical Value of Latin, p. 21.*

In addition to the mental discipline which study of them (the ancient classics) affords, they are the most helpful in the matter of correct English style, in laying sound foundations for grammatical construction, and in furnishing a basis for the study of all Modern Languages. *William H. Taft, Practical Value of Latin, p. 21.*

Modern customs are so directly the outgrowth of ancient ones, and modern politics and philosophy so intimately connected with the spirit of the Greek and the Roman, that there is no adequate appreciation of the one without some more or less familiar knowledge of the other. *Edward P. Davis, Education 32:55 Sept. 1911.*

Much of our law comes from the Roman times and so many of our legal maxims are phrased in the Latin language that to a lawyer a knowledge of Latin is peculiarly important and helpful. Greek has been of more value to me by reason of the training it gave me in a proper interpretation of words and phrases than in the practical use of the language itself. *A Mitchell Palmer, Practical Value of Latin, p. 20.*

Latin literature furnishes the supreme model for a straightforward, concise and logical style. It teaches any appreciative student close thinking and direct expression. Greek civilization is the source of love for beauty and refinement. I believe that only when equipped with some knowledge and recollection of the Classics can a good editor do his best work. *Ellery Sedgwick, Practical Value of Latin, p. 24.*

A good knowledge of the English language requires a fair understanding of Greek, but not of French or German. Compound words, new and old, come from the Greek. The new words of science and medicine are Greek. One who knows

Greek does not need to look them out in the dictionary to find that the Appendix has not yet discovered them. *Independent (editorial)* 35:1009, Aug. 9, 1883.

Every public high school and academy in the country, practically without exception, offers instruction in it; and according to the general testimony of the school examiners who are sent out by the large universities to pass upon the quality of instruction given in the several subjects accepted for admission to college, Latin and mathematics are the two subjects in which the instruction is most likely to be found satisfactory. *Andrew F. West, The Value of the Classics*, p. 360.

Biological chemistry is practically written in the Greek language. The language of botany is essentially Latin in so far as the names of the plants are concerned, and Greek in the names which deal with the anatomy of the plants and their organs. The language of mathematics is largely Greek—the language of medicine, Greek and Latin combined. The common language of the home is largely Latin and Greek. *Dr. Harvey W. Wiley, Practical Value of Latin*, p. 26.

The foes of the classics have been the most enthusiastic advocates of thorough instruction in English. It is as clear as day that the most exhaustive study of English must be deficient if it is not based on some knowledge of Latin and Greek. No persistent work in English can supply this want, and there must be many a blank space or hiatus in the knowledge of the English scholar whose training is in English alone. *Cleveland Plain Dealer, (editorial)* June 6, 1917.

Careful daily translation develops a fine feeling for synonyms and requires the exercise of good judgment and taste in their selection. It causes the pupil to acquire a sense for form and style, and trains him to express himself with clearness and precision. By reason of their inherent differences in thought-forms from our own tongue, the classical languages serve these ends to an unusual degree of efficiency. *Edward P. Davis, Education* 32:54 Sept. 1911.

I have taught law in four different Law Schools and, with some care and much interest, have looked into the pre-legal education of students in each of the Schools wherein I have taught. What I have learned in this way has produced a strong impression that students who come to the Law School with a good linguistic training, especially those who have had good training in the Classics, other things being equal, have an advantage and do better work from the beginning. *Roscoe Pound, Practical Value of Latin*, p. 9.

What is tremendously significant is the discovery by the faculties of our colleges and universities that a Greekless and all but Latinless generation of students is not equipped to enter fully and thoroughly into the heritage of civilization as it is handed on through the various departments of higher education. There is no doubt that this disquieting experience has already brought about a reaction of sentiment in the college world in favor of Greek and Latin. *George Norlin, University of Colorado Bulletin* 14:5, Sept. 1914.

The study of Latin and Greek contributes to the student's command of English thru the enlargement of his vocabulary, and the enrichment of it in synonyms expressing the finer shades of meaning; thru his acquaintance with the original or underlying meanings of words, thru his familiarity with the principles of word formation, and thru the insight into the structure of the English language afforded by a mastery of the Latin. *Francis W. Kelsey, Educational Review* 33:65 Jan. 1907.

The average high school graduate who has studied no other language than English cannot even understand literary English, much less use it. He does not know the meaning of the words, though they define themselves upon their faces to those who have had a very little knowledge of the foundation tongues. -I do not mean the nomenclature of botany and faunal naturalism and anatomy, of psychology and physical science, though these are easy to one who knows a little Greek. I mean ordinary words one floor above the street. *Frederick Irland, Atlantic Monthly* 124:48 July 1919.

What you cannot find a substitute for is the Classics as literature; and there can be no first hand contact with that literature if you will not master the grammar and the syntax which convey its subtle power. Your enlightenment depends on the company you keep. You do not know the world until you know the men who have possessed it and tried its wares before you were ever given your brief run upon it. And there is no sanity comparable with that which is schooled in the thoughts that will keep. *Woodrow Wilson, Practical Value of Latin, p. 20-21.*

Latin and Greek become effective as educational instruments in at least seven different ways: By training in the essentials of scientific methods—observation, comparison, generalization; By making our own language intelligible and developing the power of expression; By bringing the mind into contact with literature in elemental forms; By giving insight into a basic civilization; By cultivating the constructive imagination; By clarifying moral ideals, and stimulating to right conduct; By furnishing means of recreation. *Francis W. Kelsey, Educational Review 33:62-3 Jan. 1907.*

The question whether the study of the Classics is intrinsically good is one to be settled by experts, and the testimony of the greatest experts is that the Classics form one of the finest intellectual disciplines known in the history of education. On no other supposition is it possible to explain the cold, hard fact that students taking Classics are on the whole intellectually superior to the others. It makes no difference whether this is attributed to custom or not, because the fact that it is the custom for the more intellectual students to study Classics is merely an argument in favor of the Classics. *Andrew F. West, Practical Value of Latin, p. 31.*

Classical secondary education lays a broad and sure foundation for subsequent special courses and fits the recipient to take his place with credit as well in the professional and technical schools, as in the great world of business, and this after the most approved fashion. It makes youth equal to the duties of their time and station, while infusing into them the stamina

to share fully in its responsibilities. To elevate character, to ennoble ideals, to secure and ensure happiness, to give sources of influence is its main purpose. The scholarly refinement that is its fruit adds a zest and a charm to life. *Rev. F. X. Reilly, S. J. St. Mary's College Bulletin* 12:9-10 Jan. 1916.

Latin and Greek are not dead languages, because they still convey living thoughts. The real success of a democracy—the production of a finer manhood—depends less upon mechanics than upon morale. For that the teachings of the classics are excellent. They have a bracing and a steady quality. They instill a sense of order and they inspire a sense of admiration, both of which are needed by the people—especially the plain people—of a sane democracy. The classics are fresher, younger, more vital and encouraging, than most modern books. They have lessons for us to-day—believe me—great words for the present crisis and the pressing duty of the hour. *Henry Van Dyke, Outlook* 120:411 Nov. 13, 1918.

It is with feelings of gratitude that I recall the day of classical study with its rigorous discipline. The most of my preparation for my life-work was with mathematics, Greek, and Latin, and, although I fear that I could not place an algebraic equation upon the board or conjugate a Greek verb or give correctly the declension of a Latin noun, yet I am confident that the result of that study has been appreciable through all these years, and that nothing could have given me equal mental discipline and power.

As a time-saver and as a sure road to the topmost round of all things that require strong, critical, and clear thinking, I would urge the patient and untiring study of the Greek and Latin languages. This is not the only road, but it is the best one. *James R. Day, Outlook* 107:957 Aug. 22, 1914.

It becomes, therefore, a very serious question what the educational instrumentalities shall be that are to provide the next generation or two with the sort of discipline and training that Greek, Latin, and mathematics provided for our fathers and for many of us. The vague discussion of what are called social questions will not discipline or train anyone. If history be regarded as something quite independent of chronology and

as recording merely the results of the operation of economic law, then it, too, will become of little or no educational value. Those who empty out of philosophy its ancient and honorable content, and try to substitute for it a sort of checkered pavement of the sciences, are engaged in agile exercise, but they are not accomplishing any good either for philosophy or for education. *Nicholas Murray Butler, Educational Review* 54:178 Sept. 1917.

The most effective means for acquiring a broad and thorough cultivation of the mental faculties which is the aim of all true education and the best foundation for special and professional training, is recognized to be the full and accurate study of the Latin and Greek classics. In connection with these, a thorough training, is recognized to be the full and accurate study of the literature, together with a comparative study of the English language and literature, is essential.

The analytical study of language and letters promotes exactness of thought, delicacy of perception and facility of expression, by the constant and keen exercise of judgment and taste, as well as of the reasoning powers. In this regard, the languages of ancient Rome and Greece, when intelligently and seriously studied, offer greater advantages than any other. They are also most helpful to the knowledge of our mother tongue. Their structure and idiom, so remote from the language of the student, reveal to him the laws of thought and logic and demand reflection and analysis of the fundamental relations between ideas and expression; they exercise him in exactness of conception in grasping the author's meaning and in clearness and delicacy of expression in clothing that thought in the very dissimilar garb of his own native tongue. *Canisius College Catalogue* 1919-20, p. 26.

. . . Thousands of people have testified to the fact that not until they had studied a second language did English grammar become clear to them. And the second language should by all means be Latin, partly because of the completeness of its grammatical apparatus, but chiefly because the native English sentence was first made orderly, logical, serviceable, and efficient under the influence of the grammar of Latin . . . The management of clauses, for instance, of tense sequence, of

indirect discourse, of linking apparatus, of position and preposition—so troublesome in writing English—is learned from Latin as a matter of necessity; it is seldom learned thoroughly through English alone, as any journalist can testify or illustrate. . . The student of English, devoid of Latin and Greek, must pick and choose his reading with great care if he would maintain his interest for long. . . He will find whole periods of English prose impossible and much of English verse beyond his imaginative reach. He must confine himself to the contemporaneous, and often suffer the feeling of detachment even there. He is debarred from real intellectual sympathy with no inconsiderable portion of nineteenth century prose and verse—to mention only the more familiar names, with portions of Longfellow, Lowell, and Emerson, the Arnolds, the Brownings, the Morris, Landor, Keats, Shelley, Byron, Tennyson, Wordsworth, Macaulay, Newman, George Eliot, Ruskin, Rossetti, Pater, and even Tom Moore. *Joseph V. Denney, Practical Value of Latin*, p. 32-3.

It is to be feared that a degenerating process has been long going on in our own vernacular tongue. There is danger that it will become the dialect of conceits, of pettinesses, of dashing coxcombry, or of affected strength and of extravagant metaphor. Preachers as well as writers appear to regard convulsive force as the only quality of a good style. They seem to imagine that the human heart is, in all its moods, to be carried by storm. Their aim is the production of immediate practical effect. Hence there is a struggle for the boldest figure and the most passionate oratory. The same tendency is seen in the hall of legislation, and pre-eminently in much of our popular literature. Passion, over-statement, ridiculous conceits, the introduction of terms that have no citizenship in any language on earth, a disregard of grammar, an affected smartness, characterize to a very melancholy degree our recent literature. To be natural is to be antiquated. To use correct and elegant English is to plod. Hesitancy in respect to the adoption of some new-fangled word is the sure sign of a purist. Such writers as Addison and Swift are not to be mentioned in the ears of our "enterprising" age. The man or the woman who should be caught reading the *Spectator* would be looked upon as smitten with lunacy. In short there is reason to fear that our noble

old tongue is changing into a dialect for traffickers, magazine writers, and bedlamites.

One way by which this acknowledged evil may be stayed is to return to such books as Milton, Dryden, and Cowper loved, to such as breathed their spirit into the best literature of England, to the old historians and poets that were pondered over from youth to hoary years by her noblest divines, philosophers, and statesmen. Eloquence, both secular and sacred, such as the English world has never listened to elsewhere, has flowed from minds that were imbued with classical learning. *Sears, Edwards, and Felton, Classical Studies*, p. xvii-iii.

Modern educators agree that, while training the mind in one direction means, first of all, training it in that direction and not in some other, transfer from one field to another is possible whenever there are "identical elements." The identity may be of two kinds: (1) identity of content (substance)—as when a knowledge of mathematics is carried over to physics; (2) identity of form (method or procedure)—as when the mode of attack used in one language is applied to the study of another language. Under the second heading may be classed general methods of technique in learning: devices of grouping and rhythm which help in memorizing; ways of applying the attention and invoking the aid of association; and the essentials of the reasoning process, which may be transferred from one body of facts to facts in a wholly unrelated field.

Theoretically, any subject properly taught should have a broadening effect upon the student's general experience. But in actual practice, some subjects are much better adapted than others, in both subject-matter and method, to general training. E. H. Henderson, Professor of Philosophy and Psychology, Adelphi College, states (*Principles of Education*, p. 300):—"Training in method is most economical and most effective when it is given in connection with content the mastery of which is in itself valuable." An article in *The Pedagogical Seminary* for 1914, by C. K. Lyans of Clark University, points out the need of vitality in school work, and then adds that the work should also be difficult. "One who has in his school career never done anything disagreeable," says Lyans, "who has never had to study until he has gained his 'second breath,' has missed one of the most valuable results of an education.

SELECTED ARTICLES

All the studies of the learning process, as well as universal experience, prove that it is hard and intense work that educates." (pp. 387-388). C. H. Judd, Director of the School of Education, University of Chicago, who certainly can not be accused of being a partisan of the classics, declares (*Psychology of High School Subjects*, pp. 424-425): "The older subjects of the curriculum have so long served the purposes of instruction that they have cultivated a form of treatment and body of material which generation after generation has come to appreciate as a suitable vehicle for the general training of the mind. These older subjects have a distinct advantage over the newer subjects which are still trying out the subject matter which they utilize and the methods of presenting this subject matter." *Why the full Latin requirement should be kept*, p. 1-2.

NEGATIVE DISCUSSION

THE VALUE OF THE CLASSICS¹

The thorough-going advocates of Classics hold Latin and Greek to be indispensable to a liberal education. They do not allow of an alternative road to our University Degrees. They will not admit that the lapse of three centuries, with their numerous revolutions, and their vast developments of new knowledge, make any difference whatever to the educational value of a knowledge of the Greek and Roman classics. They get over the undeniable fact, that we no longer employ these languages, as languages, by bringing forward a number of uses that never occurred to Erasmus, Casaubon or Milton.

In the Middle Ages, the use of Latin was universal. After the taking of Constantinople, Greek literature burst upon Western Europe, and so entranced the choicer spirits as to bring about a temporary revival of Paganism. To the Christian scholarly enquirer, Greek was welcomed as laying open the original of the New Testament, together with the Eastern Fathers of the Church. The zeal thus springing up rendered possible the imposition of a new language upon educated youth, which might have well seemed too much for human indolence. Our Universities accepted the addition; and the teachers and pupils had to speak Latin, and read Greek.²

The men of the fifteenth and sixteenth centuries had their own follies, errors, and superstitions; but their mode of estimating the worth of the classical tongues was plain common sense. Says Hegius, the Dutch scholar (master of Erasmus, head of the College of Deventer, 1438-1468): 'If anyone wishes to

¹ Alexander Bain. *Education as a science*. Chapters 10 and 11.

² Thus in the Middle Ages Latin was made the groundwork of education; not for the beauty of its classical literature, nor because the study of a dead language was the best mental gymnastic, or the only means of acquiring a masterly freedom in the use of living tongues, but because it was the language of educated men throughout Western Europe, employed for public business, literature, philosophy, and science, above all, in God's providence, essential to the unity, and therefore enforced by the authority, of the Western Church.—(Mr. C. S. Parker, in *Farrar's Essays on a Liberal Education*, p. 7.)

understand grammar, rhetoric, mathematics, history, or Holy Scripture, let him read Greek. We owe everything to the Greeks.' Luther advocated the new learning, in his own vehement way: 'True though it be that the Gospel came and comes alone by the Holy Spirit, yet it came by means of the tongues, and thereby grew, and thereby must be preserved.' Melancthon regarded the languages solely as means to ends, and his scheme of education embraced all the departments of knowledge on their own account. Hieronymus Wolf, of Augsburg, was emphatic on the same point: 'Happy were the Latins,' he says, 'who needed only to learn Greek, and that not by school-teaching, but by intercourse with living Greeks. Happier still were the Greeks, who, so soon as they could read and write their mother tongue, might pass at once to the liberal arts and the pursuit of wisdom. For us, who must spend many years in learning foreign languages, the entrance into the gates of Philosophy is much more difficult. For, to understand Latin and Greek is not learning itself, but the entrance-hall and ante-chamber of learning.' (Parker.)

That the value of a knowledge of the classics, on the ground of the information exclusively contained in Greek and Latin authors, should decrease steadily, was a necessary result of the independent research of the last three hundred years.' The rate of decrease has been accelerated during the last century by the abundance of good translations from the classics. In this progressive decrease a point must be reached when the cost of acquiring the languages would be set against the residuum of valuable information still locked up in them, and when the balance would turn against their acquisition. In the meantime, however, other advantages have been put forward that are considered sufficient to make up for the loss of value brought about by the causes now mentioned.

I. *The Information Still Locked up in Greek and Latin Authors*

This is the professional argument, but the case respecting it is so very obvious that we can hardly be too brief in presenting the matter.

That there is not a fact or principle in the whole compass of physical science, or in the arts and practice of life, that is not fully expressed in every civilized modern language, will

be universally allowed. There will not be quite the same consent as regards moral and metaphysical science; it being contended that in Plato and in Aristotle, for example, there are treasures of thought that never can be separated from their original setting in the Greek language. Again, the ancient literatures are the exclusive depositories of the historical and social facts of the ancient world; but all this is eminently translatable, and has been abundantly reproduced in the modern tongues. A certain exception, however, is made here also, namely, that for the inner or subjective life of the Greeks and Romans, the best translations must still be at fault.

As regards Greek philosophy, it may be safely said that its doctrinal positions and subtle distinctions are at this moment better understood through translators and commentators, writing in English, French, and German, than they could have been to Bentley, Porson, or Parr. The truth is that, in translating, a knowledge of the subject is at least co-essential with a knowledge of the language. When the Professor of Greek Literature, in Cosmo's Platonic Academy at Florence, lectured on Plato, the Latin Aristotelians asked with indignation how a philosopher could be expounded by one who was none himself.

That the inner life of the Greeks and Romans cannot be fully comprehended unless we know their own language, is a position that gives way under a close assault. The inner life must be understood from the outer life, and that can be represented in any language. Whatever sets well before us the usages, the modes of acting and thinking, the institutions, and the historical incidents of any people, will enable us to comprehend their inner-life, as well as can be done in surveying them at a distance; and all this is quite possible through the medium of translators and commentators.

This seems enough as far as concerns the professions. In medicine, for example, it will not be contended that there is anything to be gained by classical scholarship. Hippocrates has been translated. Whatever Galen knew is known independently of his pages. But indeed, only a purely historical value can attach to any medical work of the ancient world.

Again, the lawyer can obviously dispense with Greek. There may be a certain claim made for Latin in his case, in consequence of our position with reference to Roman Jurisprudence.

But this too has been sufficiently represented in English works to make the whole subject accessible to an English reader. The Latin terms that have to be retained as untranslatable by single words in English can be explained as they occur, without anyone requiring to master the entire Latin language. As to the power of reading Latin title-deeds, if one man in a business establishment possesses it, that is enough.¹

The plea for classics to the clergy has always been accounted self-evident and irresistible. Even here, however, there are qualifying circumstances. It is the business of a clergyman to understand the Bible, which involves Hebrew and Hellenistic Greek: Classical Greek and classical Greek authors are not necessary; while the utility of Latin extends only to the Latin Fathers, the scholastic theology, and the learned theologians of the Reformation, including Luther, Melancthon, Calvin, and Turretin.

Now there is no book that has been so abundantly commented on as the Bible. Every light that scholarship can strike out has been made to shine through the vernacular tongues; there is scarcely a text but can be understood by an English reader as the ablest scholars understand it; and the study of the original languages must be prosecuted to a pitch of first-rate scholarship before anything can be gained in addition to what everyone may know without scholarship.

Among the caprices of opinion on the present question may be ranked the very slight stress that is put upon the Hebrew language in the education of the clergy. The most exacting churches receive a candidate for orders on a very easy Hebrew pass; and it is never supposed that more than a small number of preachers in any church habitually consult the Hebrew Bible. Yet the Old Testament, containing as it does a large mass of sentiment and poetry, and referring to a state of society far removed from our own, is one of the books most difficult to exhibit in translation. Granted that, as respects the Old Testament, there may be an unexhausted, possibly an inexhaustible, suggestiveness in the knowledge of the original tongue, the fact remains that inattention to Hebrew is all but universal; while, as respects the New Testament, a knowledge of the

¹ Mr. Sidgwick says a lawyer 'ought to be acquainted with Latin grammar, and a certain portion of the Latin vocabulary.' The necessity for the grammar is not self-evident.

original can scarcely add anything to the ample exegesis provided by theological scholars. Whitfield knew no Hebrew and little Greek.

The Hellenistic Greek of the New Testament does not involve classical Greek authors. It might be taught like Hebrew in the divinity schools, and entirely disconnected from the literature of Pagan Greece. That these Pagan authors should be nursing fathers and nursing mothers to the Christian Church, is a standing wonder. That Christian youth, so carefully withheld from the language of sexual impurity, should be allowed such a liberal crop of wild oats as a course of classical reading supplies, is not less wonderful.

The natural course as regards the clergy would be to encourage a small number of scholars to prosecute the study of the original languages of the Bible and all the allied learning, and to dispense with these languages as regards the mass of working clergy, who may turn their time to more profitable account.

II. *The Art Treasures of Greek and Roman Literature are Inaccessible Except Through the Languages*

It must ever remain true that certain artistic effects of literary composition, and more especially poetry, are bound up with the language of the writer, and cannot be imparted through another language. These very peculiar effects, however, are not the greatest in themselves, nor the most valuable for literary culture. The translatable peculiarities far transcend in value the untranslatable; if it were not so, where should we be with our Bible? Melody is the most intractable quality; of this alone can little or no idea be imparted by translations. Even the delicate associations with words can be expounded through our own language; just as they must be to the pupil who is studying the original. As regards all dead languages, much of this subtle essence must have vanished beyond recovery. Learning Greek does not put one in the same position to Homer and Sophocles, that learning German does to Goethe. All that a scholar can know he may find means of imparting to one that is not a scholar.

The subtle incommunicable aroma of classical poetry is one of the luxuries of scholarship. The mass of students cannot reach it; and it may be bought too dear. Moreover, the translatable

virtue of the great poets is so great, that we may have many a rich feast, through translations alone: witness the enthusiasm for Pope's 'Homer.' Horace is perhaps the most untranslatable poet of antiquity; but the difficulty has been a stimulus to marvels of verbal dexterity in approaching the original; and he that is conversant with the translations now accessible to the English reader, cannot be far from the kingdom of heaven.

III. *The Classical Languages Train the Mind as Nothing Else Does*

This argument was not advanced in the days when the dead languages were useful in their character as languages; either it was not felt in the sixteenth and seventeenth centuries, or it was unnecessary. That it is so much relied upon now, is tantamount to a surrender of the previous arguments, or at least suggests doubts as to their sufficiency. It has that amount of vagueness about it that would make a convenient shelter to a bad case. We must ask specifically what the training consists in.

For one thing, there is abundant employment given to the memory; but the proper word for this is not 'trained' but 'expended.' A certain amount of the plastic force of the system is used up, and is therefore not available for other purposes. This is the cost of the operation, for which we have to show an equivalent in solid advantages.

The faculties supposed to be trained are the higher faculties named Reason, Judgment, and Constructive or Inventive Power; and the exercises reckoned upon to give the training are conning grammar, and translating.

The influence of Grammar can soon be told. To learn Grammar is, besides employing memory, to understand certain rules and to apply them as the cases arise, bearing in mind the exceptions when there are any. Inflection is the easiest part. Latin nouns in *a* of the first declension are declined according to a type; one example is given, as *penna*, and the pupil has to adhere to the type with *femina* and the rest. This represents the operation that is requisite whenever we can rise from particulars to general knowledge. 'A fine day,' 'a good road,' 'a boiling kettle,' 'a loaf of bread,' are general ideas that are connected with practical injunctions, and whoever has to comply

with these injunctions must understand the ideas and apply them as the occasion serves. Sometimes the notion is accessible to the weakest capacity, sometimes it is the reverse; there are all degrees of difficulty up to the subtleties of professional lore, and the abstruseness of science or philosophy. The chief point is, that no branch can have a monopoly of the exercise of seeing the general in the particular; we cannot evade the necessity of the task. Whether one subject is better than another for our education in the matter depends upon whether it is possible to ease the labour of conceiving the more difficult abstractions by something foreign to them; whether mathematics or metaphysics can be made easier by toiling in some foreign lines of thought, as Latin Grammar, English Grammar, or Botany. It remains for anyone to show that such an influence exists; the arguments for the efficacy of grammatical discipline do not reach the point, they assume that grammar has a monopoly of exercising the mind upon generalities, a point that has yet to be proved.

Grammar as exemplified in the Latin and Greek languages is particularly devoid of subtlety, until we come to certain delicacies of syntax, as in the construction of the tenses and moods of the Verb. The Parts of Speech are assumed without any definition; they are recognized by the Inflection test, and not by their function in the sentence; being in that respect very different from what is found in English Grammar. This has been made an argument for taking Latin before English—the easy grammar before the abstruse one. But the greater should imply the less. If, at the proper age, a pupil has mastered English Grammar, he has, in point of reasoning power, gone a step beyond Latin or Greek grammar, and should therefore be relieved from further labour for perfecting his reasoning faculties in the grammatical field.

It is in the exercise of translating from Latin or Greek into English, and *vice versa*, that the highest mental efforts are made, and the greatest strain put upon the faculties. Accordingly, it is to this exercise that the supposed training more especially applies. Now the mere conquering of difficulty is not special to any line of study; we must further enquire what are the special difficulties to be overcome. The exercise of translating is a constructive effort: given a passage, a certain

amount of grammatical and verbal knowledge, and the use of a dictionary, the pupil has to divine the meaning. There are three stages in the pupil's progress. In the first, his information and resources are unequal to the task, in which case the labour can do him very little good; we are not the better for working at a point where we cannot make any progress. The second stage is where, by a certain measure of application, the pupil can succeed; in which case, the operation is exhilarating and rewarding, and will be achieved. The highest stage is when the work can be performed with ease, and without any effort at all; in which stage there is no difficulty to be overcome, and, therefore, very little effect accruing from the exercise. We are to assume, what is not always the case, that the student can be uniformly placed in the second situation, and are to enquire what there is in the particular work to train, discipline, or strengthen any of the higher faculties.

The translation exercise is a tentative process; the meanings of the separate words have to be ascertained; and out of several meanings of any one word, a selection has to be made such as to give sense along with the selected meanings of the others. Various combinations have to be tried; baffled at one attempt, the student must make a second and a third, until at last he alights upon something that pays a due regard to every word and every peculiarity of grammar. A considerable amount of patient effort is demanded, and the long-continued exercise of patient effort must do something to form habits of application. There is not, however, anything specific, unique, or unparalleled in the operation. All study whatsoever needs a similar exercise of patient application; and many kinds of study take precisely the same form, namely, assigning to words alternative meanings, until some one meaning is hit upon that resolves a difficulty. It is the application needed to solve riddles and conundrums. To make out the meaning of a scientific proposition, to find the rule that fits a given case, we must try and try again; we reject one supposition after another as not consistent with some of the conditions of the problem, and remain in patient thought until others come to mind.

It is in the interpretation of language that most difficulty is felt in keeping the pupil always in the medium position above described; giving him work to do that shall neither exceed his

powers, nor be too easy to call them into full exercise. With a passage that the dictionary does not give the means of rendering, the chance is that the attempt will not be seriously made, so that the mind is not put on the *qui vive* to drink in with avidity the master's explanation. It is, moreover, generally admitted that the use of 'cribs' does away with the good of the situation, as regards translating into English. Hence to secure any discipline at all, the operation of translating from English into Latin and Greek must be kept up, although in itself the least useful of any.

The remark could not fail to be made that the operation of translating is necessarily the same for ancient and for modern languages; and, therefore, any modern language yields whatever discipline belongs to the situation. It cannot avail much, in reply, to advert to the peculiarities of the Latin and Greek Grammars—the more highly inflexional character of the languages; for each language has its specialties, and the business of the pupil simply is to attend to them. Every language must express the same facts of time and manner, and it cannot be very material, as far as regards mental discipline, whether it is by inflexion or by auxiliaries. The fact of inflexion is sufficiently experienced in any case; and how far it is carried is an inferior consideration.

In Science, far more than in languages, is it possible to adjust the difficulties at each stage to the strength of the pupils, although, undoubtedly, to do this in any subject needs very good teaching. The Grammar of language being most nearly allied to science, can be best graduated in this way; while, in the miscellaneous chances of translation, difficulties start up without any reference to order or the preparation of mind of the pupils, and the thing cannot be otherwise.

The argument from Training is applied to certain special points, some of which will be considered under separate heads: such are the discipline in English and in Philology generally. Much stress is laid upon the remark that it is necessary to know more languages than our own to be delivered from certain snares of language; and the favourite example is the ambiguity of the verb 'to be.' It so happens, however, that this very ambiguity—predication and existence—was pointed out by Aristotle (*Grote's Aristotle*, i. 181).¹

¹ In an address to the Social Science Association in 1870, Lord Neaves

In the interesting Rectorial Address of Professor Helmholtz, delivered this year to the University of Berlin, the merits and demerits of the different academical institutions of Europe are freely indicated. With reference to the English Universities, Oxford and Cambridge, the professor thinks his own countrymen should endeavour to rival them in two things. 'In the first place, they develop in a very high degree among their students, at the same time, a lively sense of the beauties and the youthful freshness of antiquity, and a taste for precision and elegance of language; this is seen in the fashion in which the students manage their mother tongue.' This must refer to the prominence still given to the classics in Oxford and Cambridge; yet, in Germany, the classics are far more studied than in England, whether we consider the universal compulsion of the Gymnasia, or the special devotion manifested by a select number at the Universities. Whatever good mere classical study can effect must have reached its climax in Germany. As regards Oxford and Cambridge, and particularly Oxford, the best parts of the teaching seem to be those that depart most from the classical teaching, as, for example, the very great stress laid upon writing a good English essay. It is often said, that even in a professedly classical examination, a candidate's success is more due to his English Essay than to his acquaintance with Greek and Roman authors.

After refuting a number of the alleged utilities of classical learning, Mr. Sidgwick still reserves certain distinct advantages as belonging to the study of language. 'In the first place, the materials here supplied to the student are ready to hand in inexhaustible abundance and diversity. Any page of any ancient author forms for the young student a string of problems sufficiently complex and diverse to exercise his memory and judgment in a great variety of ways. Again, from the exclusion of the distractions of the external senses, from the simplicity and definiteness of the classification which the student has to apply, from the distinctness and obviousness of the points that he is called on to observe, it seems probable that this study calls

recommended the study of Latin, Greek, and French, as the best means of cultivating precision of thinking. Now, whether or not the writers in those languages are distinguished above all others for precision, it is a singular fact, that these are the languages of the three peoples most remarkable for confining their attention to their own language.

forth (especially in young boys) a more concentrated exercise of the faculties it does develop than any other could easily do. If both the classical languages were to cease to be taught in early education, valuable machinery would, I think, be lost, for which it would be somewhat difficult to provide a perfect substitute.' (*Essays on a Liberal Education*, p. 133.)

The materials here spoken of must mean the subject matter of the ancient authors, and not simply the languages; this, however, does not help the case, as the matter can be far better given in translations. The second reason—the exclusion of the senses, and the simplicity and definiteness of the classification to be applied—must refer to the language part; but it contains nothing special to the classical languages. Moreover, as regards putting before the mind of a student distinct issues, and still more in adapting these to the state of his faculties and advancement, the learning of a language seems to me far inferior to most other exercises.

IV. *A Knowledge of the Classics is the Best Preparation for the Mother Tongue*

This must have reference either (1) to the Vocables of the Language, or (2) to the Grammar and Structure of our composition.

(1) As regards the vocables, we have to deal with the presence of Latin and Greek words in English. There being several thousands of our words obtained directly or indirectly from the Latin, it may be supposed that we should go direct to the foundation head, and learn the meanings in the parent language. But why may not we learn them exactly as they occur in the mother tongue? What economy is there in learning them in another place? The answer must be, with a qualification to be given presently, that the economy is all in favour of the first course. The reasons are plain. For one thing, if we learn the Latin words as they occur in English, we confine ourselves to those that have been actually transferred to English; whereas in learning Latin as a whole, we learn a great many words that have never been imported into our own language. The other reason is probably still stronger, namely, that the meanings of a great number of the words have greatly changed since their introduction into English; hence, if we go back to the sources, we

have a double task; we first learn the meaning in the original, and next the change of meaning that followed the appropriation of the word by ourselves. The meaning of 'servant' is easiest arrived at, by observing the use of the word among ourselves, and by neglecting its Latin origin; if we are to be informed what 'servus' meant in Latin, we must learn further that such is *not* the present meaning; so that the directing of our attention to the original, although a legitimate and interesting effort, does not pertain to the right use of our own language.

Besides the vast body of Latin words entering into our language, as a co-equal factor with the Teutonic element, there is a sprinkling of special terms both Latin and Greek, adopted for technical and scientific uses. The appropriation of many of these is recent, and the process is still going on. Even with these, however, it is unsafe to refer to the original tongues for the meaning; we must still see what they mean as at present applied. A knowledge of Greek would be a fair clue to the meaning of 'thermometer,' and 'photometer,' and a few others; but for the vast mass of these appropriations, it gives no clue whatever, or else it puts us on the wrong scent. 'Barometer,' as 'weight-measure,' would be most suitably applied to the common beam and scales; the real meaning would never be guessed. So, 'eudiometer' cannot suggest its meaning to a Greek scholar; 'hippopotamus' is equally enigmatic. Of the 'ologies' very few correspond to their derivation. We have such conflicting names as 'astrology,' 'astronomy'; 'phrenology,' 'psychology,' 'geology,' 'geography'; 'logic,' 'lographer,' 'logomachy'; 'theology,' 'theogony'; 'aerostatics,' 'pneumatics.' 'Theology' being the science of 'God,' 'philology' should be the science of 'friendship' or the affections. It was remarked by Mr. Lowe that the word 'aneurism,' to a Greek scholar, would be misleading; he would not at once suppose that it is a derivative of the Greek verb *ἀνεύπορω*, 'to widen.' So with the word 'methodist,' the knowledge of Greek is not a help but a snare.

It is well understood to be a reason for borrowing foreign words, that they do not suggest any meaning but the one intended to be coupled with them. In obtaining words for new general ideas, our native terms contain misleading associations; the great virtue of the names—'Chemistry,' 'Algebra,' 'rheumatism,' 'hydrated,' 'artery,' 'colloid'—is that we do not know what they originally meant; any designation that we could

invent in our own language for such vast sciences as Chemistry and Algebra would contain some narrow and inadequate conception which would be a perpetual stumbling-block to the learner.

The only qualification to the principle of learning the meanings of words from present use solely, is, that the classical words in our language are mostly derivatives from a small number of roots; so that a knowledge of the meanings of say a hundred roots assists in discovering the meanings of thousands of derivatives. Not but that we must still check every derivative by present use; yet the memory is considerably assisted by a knowledge of the primitive meaning as partly retained in the numerous compounds. We must observe the present employment of the words—'agent,' 'actor,' 'enact,' 'action,' 'transaction'; nevertheless, when we are informed of the original sense of the root 'ago,' we are enabled thereby to obtain a speedier hold of the meanings of the derivations. So with the Greek roots,—'logos,' 'nomos,' 'metron,' 'zoon,' 'theos,' &c. This advantage, however, is attainable without entering upon a course of classical study. The roots actually employed in the language are separated and presented apart, and their derivatives set forth; and we are thus taught exactly that portion of the Latin and Greek vocabulary that serves the end in view.

(2) The argument as applied to the Grammar or Syntax of our own language is equally at fault. The natural course in learning the grammatical order of English sentences is to study and practice English composition. To be habituated to different sentence arrangements must be rather obstructive than otherwise. The reference to any other language can only be a matter of curiosity. If it ever happened that our language could borrow an effective arrangement of syntax from any other language, the borrowing should have taken place once for all, so that all succeeding ages might adopt it as a naturalized usage.

In connection with this argument may be taken the frequent allegation that the classics are an introduction to general Literature, as affording the best models of taste and style; in studying which we improve our compositions in our own language. There is here a host of loose assumptions. The excellence of the ancient writers is not uniform, and some assistance must be given to the pupil in discriminating the merits from the defects,

a lesson that would be best begun in our own language. Moreover, the remark just made applies again. Whatever effects can be transferred by us to our own compositions cannot remain to be transferred now. The vast series of classical scholars that have written in the modern languages ought long before this time to have embodied whatever beauties can be passed on from the ancient literatures. In modern European literature there is a large school of imitators of the ancient authors, through whom we can derive at second hand all the characteristic effects possible to be reproduced in modern compositions.

V. The Classical Languages are an Introduction to Philology

This argument is one of the recently discovered make-weights on the side of classical teaching. The science of Philology is a new science; and before launching it into the present controversy, its claims as a branch of school or college education should be established on independent grounds. Having its ultimate roots in the human mind, like a great many other sciences, it is a recondite branch of the vast subject of Sociology, or Society, viewed both as structure and as history. Its immediate sources are the existing languages of mankind, which are made the subject of comparative study, with a view to trace community as well as diversity of structure (whence springs *Universal Grammar*), and also historical connection and derivation. Such a subject may enter into the curriculum of the higher education, but not at a very early stage; it must allow priority to the more fundamental sciences.

Assuming that the subject is to be received among school and college subjects, the bearing of the Classical languages is somewhat insignificant. Latin and Greek, as usually taught, are both defective and redundant in their bearing on General Philology. There are only two languages out of a multitude that have to be more or less minutely compared. The examples taken from other languages, Sanscrit for example, are of as great importance as those from Greek and Latin, and we cannot be expected to make an equal study of all these languages. In point of fact, we must be taught Philology by examples cited from many languages, which we do not pay any further attention to; and the Greek and Latin examples may be

obtained in the same partial way. The full knowledge of the Greek and Latin authors does not avail us for this subject.¹

These are the leading arguments in favour of the present system of classical study. The supposition is that by their cumulative effect they justify the continuance of the system after the original occasion of its introduction has ceased. On reviewing the tenor of these arguments, however, we find that, after all, they do not support the real contention; which is, that Latin and Greek, and they alone, as an undivided couple, shall continue to form the staple of our higher education. Several of the arguments apply equally to modern languages, and others would be met by the retention of Latin, by itself.

The case is not complete until we view the arguments on the other side.

I. *The Cost*

The amount of time consumed in classical teaching during the best years of youth is well known to be very great, although not everywhere the same. In most classical schools in this country more than half the time of the pupils is occupied with Latin and Greek for a number of years; and not long ago, nearly the whole time was taken up in many of our seminaries. In Germany, at the Gymnasia, six hours a week are given to Latin, for four years, and seven hours a week for other two years (age from twelve to eighteen): seven hours a week are given to Greek, for two years, and six hours a week for other two years (age from fourteen to eighteen). At the University, it is optional to pursue Classics.

The question, therefore, arises—Are the benefits commensurate with this enormous expenditure of time and strength? We might grant that a small portion of time—two or three hours a week, for one or two years—might possibly be repaid by the advantages; but we are utterly unable to concede the equivalence of the results to the actual outlay.

¹ Mr. Sidgwick has some admirable remarks on this point in his *Essay* already referred to (p. 128). Mr. A. H. Sayce expresses himself strongly as to the small linguistic value of the two classical tongues. 'For purely philological purposes they are of less interest than many a savage jargon, the name of which is almost unknown, and certainly than those spoken languages of modern Europe whose life and growth can be watched like that of the living organism, and whose phrenology can be studied at first hand.' 'The greater the literary perfection of a language, the less is its importance to the mere glottologist.' (*Nature*, November 23, 1876.)

In the more recent system of teaching, under which some attention is given to the history and the institutions of Greece and Rome, a certain amount of valuable knowledge is intermixed with the useless parts of the teaching; and for this a small figure must be entered on the credit side. But all such knowledge could be imparted in a mere fraction of the time given to the languages.

The classical system has been the practical exclusion of all other studies from the secondary or grammar schools. For a long time, the only subject tolerated in addition was a very elementary portion of Mathematics—Euclid and a little Algebra. The pressure of opinion has compelled the introduction of new branches—as English, Modern Languages, and Physical Sciences; but either these are little more than a formality, or the pupils are subjected to a crushing burden of distracting studies. To be in school five hours a day, with two or three hours for home tasks, is too great a strain on youths between ten and sixteen. Moreover, in the evening preparations, it is found that the classical lessons absorb the greater part of the attention.¹

The argument from disproportionate cost is sometimes met by alleging the defectiveness of the usual methods of teaching the languages; and many short and easy methods have been propounded. Experience has not yet shown any means of seriously reducing labour; and the thing is not likely. A vast acquisition is unavoidably involved in any cultivated language. The Grammar and the Vocabulary cannot be committed to memory without a large expenditure of strength; and the authors to be read have each their special peculiarities to be mastered. The observance of the methods of good teaching will make a considerable and important difference, but will not dispense with the demand of two or three hours a day for several years to attain a moderate proficiency in Latin and Greek. Moreover, the system as practised, throws away the best known device for accelerating lingual study; namely, allowing a familiarity with the subject matter of the several authors to

¹ We are rapidly approaching a compromise between the new and the old systems, on the basis of omitting one of the two classical tongues, that is, Greek; the Latin alone to continue as an imperative branch of the curriculum of higher education. A considerable relief will no doubt be experienced by throwing Greek into option; but the radical evil of our Grammar School system will remain. The two best hours of the day for several years will still be given to a barren occupation; and the thorough reconstruction of the scheme of liberal studies will be indefinitely postponed.

be attained in advance. The pupils in the Latin and Greek classes have not as yet been initiated into any important subject; and what renders the study tolerable is the large devotion of time to the one theme of universal interest—personal narrative.

II. *The Mixture of Conflicting Studies Impedes the Course of the Learner*

On the supposition that the classical languages are taught, not in their simple character as languages, but with a view to logical training, training in English, literary culture, general philology,—the carrying out of so many applications at one time, and in one connection, is fatal to progress in any. Although the languages may never actually be used, the linguistic difficulties of the acquisition must be encountered all the same; and the attention of the pupil must be engrossed in the first instance with overcoming these difficulties. It is, therefore, an obvious mistake in teaching method to awaken the mind to other topics and considerations, while the first point has not been reached. I have everywhere maintained as a first principle of the economy or conduct of the Understanding, that separate subjects should be made separate lessons. This is not easy when two studies are embodied in the same composition, as language and meaning; in that case the separation can be effected only by keeping one of the two in the background throughout each lesson.

The least questionable effect of classical study (although one equally arising from modern languages) is the exercise of composing in our own language through translation. Still, it is but a divided attention that we can give to the exercise. We are under the strain of divining the meaning of the original, and cannot give much thought to the best mode of rendering it in our own language. This is necessarily a varying position. There may be occasions when the sense of the original is got without trouble, and when we are free to apply ourselves to the expression—in English, or whatever language we are using. But this is all a matter of chance; and such desultory fits of consideration are not the way to make progress in a vast study. Moreover, the master is a man chosen because he is a proficient in classics, not because he has any special or distinguishing acquaintance with the modern language. Now it must seem

incontestable that the only way to overtake an extensive and difficult department of information and training, is to proceed methodically, and with exclusive devotion of mind at stated times, under the guidance of an expert in the department. All experience shows that only very inferior English composition is the result of translating from Latin or Greek into English. There is necessarily a good deal of straining to make the English fit the original; while the greater number of the most useful forms of the language are never brought into requisition at all.

There is something plausible in the supposition of cultivating all the faculties at one stroke, as if an exercise could be invented that could teach spelling, cooking, and dancing, simultaneously. Because the same piece of composition involves grammar, rhetoric, scientific information and logical method, we are not to infer that it should be the text for all these lessons at one time. It is not merely that the way to carry the mind forward in the several departments is, to keep it continuously fixed on each for a certain duration; equally pertinent is the fact that, although every passage occurring in a lesson must needs embody language, rhetoric, and information, the same passage does not equally suit for all the applications.

It may be true that classical education is many-sided; but what if it is defective on each side? 'The very fact that the same instrument is made to serve various educational purposes, which seems at first sight a very plausible argument in its favour, is really, for the majority of boys, a serious disadvantage.' (Sidgwick, *ut supra*, p. 127.)

The study of fine Literary effects cannot be carried on in connection with Latin and Greek, not only because of the distraction of the mind with other things, but because of the random, uncertain, unconsecutive way that the examples are brought forward. Even if there were no order whatever in the parts of a subject, still the irregular presentation of these would be adverse to a cumulative impression. The same would apply to General Philology, if that were regarded as one of the uses of classical study.

The conclusion on the whole is, that the teaching of language is most rationally conducted when it stands on the original footing of the classical languages in the fifteenth and sixteenth centuries, i.e. when the language itself as a means of interpretation and communication, is the fact, and the whole fact.

The attention of the pupils could then be kept to the one point of mastering grammar and vocables: the authors studied would be studied with this sole aim. The language teacher is not an interpreter and expounder of history, poetry, oratory and philosophy, but an instrument for enabling the pupils to extract these from their original sources in some foreign tongue.

III. The Study is Devoid of Interest

This may not be universally admitted, but it is sufficiently attested for the purposes of the present argument. There is, first, the dryness inseparable from the learning of a language, especially at the commencement. There is, next, the circumstance that the literary interest in the authors is not felt, for want of due preparation. It is a fact that, but for the never-failing resource of sensation narrative, by which we arouse the dormant intellect of the child in the second standard, the reading of classical authors would be intolerable at the early age when they are entered upon.

It is the nature of science to be more or less dry; until its commanding power is felt the path of the learner is thorny. But literature is nothing, if not interesting. There should be even in a course of Belles-Lettres, a certain amount of science, in the shape of generalities and technicalities; but these are soon passed, and the mind is free to expatiate in the rich pastures of the literary domain. Literature, instead of being the dismal part of the school exercises, should be the alternative and relief from Mathematics and the elements of Science generally. This cannot be, if the pupils are thrust prematurely upon a foreign literature while mastering several new vocabularies. It is now plain to the best educationists, that our own literature must be the first to awaken literary interest, and prepare the way for universal literature.

IV. The Study Panders too Much to Authority in Matters of Opinion

The classical student is unduly impressed with the views promulgated by the Greek and Roman authors, from the very length of time that he is occupied with them. The authority of Aristotle, once paramount in the world of thought, has long ceased to be infallible, but the reference to his supposed opinions

is still out of proportion to any value that can now belong to them. Any views of his as to the best form of government, as to happiness and duty, are interesting as information, but useless as practice.

A curious and expressive incident occurred at a recent meeting of the British Association. Sir William Thomson, in the course of a paper read before his section, desired his hearers, when they went to their homes, to draw their pens through a certain paper of his in their copies of the 'Proceedings of the Royal Society.' It would be well if the example were imitated by every philosopher that has happened to change any of his opinions. Even if we accorded to Aristotle a commanding sagacity in Ethics and in Politics, we should like to have his latest decisions as to the value of what we now possess as his writings.

The Renovated Curriculum

On the supposition that Languages are in no sense the main part of Education, but only helps or adjuncts under definite circumstances, the inference seems to be, that they should not, as at present, occupy a central or leading position, but stand apart as side subjects available to those that require them.

I conceive that the curriculum of Secondary or Higher Education should, from first to last, have for its staple the various branches of knowledge culture, including our own language. The principal part of each day should be devoted to these subjects; while there should be a certain amount of spare time to devote to languages and other branches that are not required of all, but may be suitable to the circumstances of individuals.

The essentials of a curriculum of the Higher Education may be summed up under three heads:—

I. SCIENCE, including the Primary Sciences, as already set forth; some one or more of the Natural History Sciences—Mineralogy, Botany, Zoology, Geology; to which may be added Geography. To what extent this vast course should enter into general education has already been sufficiently discussed. Our present purpose does not require the nice adjustment of details.

II. A course of the HUMANITIES, under which I include (1) History, and the various branches of Social Science that can be conveniently embraced in a methodical course. Mere

narrative History would be merged in the Science of Government, and of Social Institutions, to which could be added Political Economy, and, if thought fit, an outline of Jurisprudence or Law. This would put in the proper place, and in the most advantageous order of study, one large department recently incorporated with the teaching of the classical languages by way of redeeming their infertility.

(2) Under the Humanities might next be included a view more or less full, of Universal Literature. Pre-supposing those explanations of the Literary Qualities and Arts of Style that should be associated, in the first instance, with our own language, and also some familiarity with our own Literature, we could proceed to survey the course and development of the Literature of the World through its principal streams, including of necessity the Greek and Roman Classics. It is needless to add that this should be done without demanding a study of the original languages. How far a Philosophy of Literature should penetrate the survey I do not at present enquire. Materials already exist in abundance for such a course. It is the beau-ideal of Rhetoric and Belles-Lettres as conceived by the chief modern authorities in the department, as for example, Campbell and Blair in last century. Only, I should propose that the elements of Rhetoric, in connection with our own Literature, should lead the way.

Such a course would carry out, with effect and thoroughness, what is very imperfectly attempted in conjunction with the present classical teaching. A tolerably complete survey of the chief authors of Greece and Rome, with studies upon select portions of the most important, could be achieved in the first instance; and it might be possible to include also a profitable acquaintance with the great modern literatures.

III. ENGLISH COMPOSITION AND LITERATURE.—This might either pervade the entire curriculum, or be concentrated in the earlier portions, the General Literature being deferred. What it comprises, according to my view, has been sufficiently stated. The survey of Universal Literature, would operate beneficially upon the comprehension of our own.

These three departments appear to me to have the best claims to be called a Liberal Education. The deviation from the received views is more in form than in substance. I would not call Science alone a Liberal Education, although a course that implied a fair knowledge of the Primary Sciences, a certain

amount of Natural Science, and a wide grasp of Sociology, would be no mean equipment for the battle of life. I think, however, that the materials of Sociology might be accumulating all through the curriculum, and might serve to alleviate the severity of the strictly scientific course.

I think, moreover, that a Liberal Education would not be generally considered complete without Literature, although people must needs differ as to the amount. I hold that the three departments stated are sufficiently comprehensive for all the purposes of a general education, and that no other should be exacted as a condition of the University Degree—the received mode of stamping an educated man.

Such a course should be so conducted as to leave a portion of time and strength for additional subjects. An average of two or three hours a day might be occupied with the continuous teaching in the three departments. Assuming a six years' curriculum—covering the Secondary School and the University courses—it is easy to see that a large amount of thorough instruction might be imparted in those limits; leaving perhaps one third of the pupil's available time, for other things.

Of the extra, or additional subjects, Languages would have the first claim. These, however, should not be under any authoritative prescription; they should never enter into any examinations for testing general acquirements. Every person going through such a course as we have supposed, would be urged and advised to take up at least one foreign language, giving the preference to a modern language: the intention being to learn it up to the point of use as a language. How many languages any given person should study must depend upon circumstances. The labour of a new language is not to be encountered without a distinct reason. It is never too late to learn any language that we discover ourselves to be in want of. If we need it for information on a particular subject, we can learn it up to that point and no farther.

An hour every day may be available at any part of the course for a new language, whether modern or ancient. If either Latin or Greek is taken up, it would be learnt strictly by the grammar and the dictionary; just as Dutch and Gaelic would be learnt: we should not diverge into literary matters, or the criticism of beauties; all which would be reduced to a small compass.

after a survey of the literature, and a familiarity with good translations.

There would be no need to begin the study of language early, and little advantage: and it would be undesirable to take two languages together. There are other matters to divide the extra hours with languages. I need only mention Elocution as appertaining to every one. For more special tastes would be provided Music and Drawing. There would also be a variety of special courses on branches of knowledge not embraced in the regular curriculum. In a well-provided institution, there might be classes devoted to Anglo-Saxon, General Philology, select portions of History, and so on. I am not specially adverting to the topics preparatory to the several professions.

The reasons for the change now proposed have been given in substance already. They are contained in the general argument as to the position of languages in general, and of classics in particular. Besides the consideration that languages should be learnt only when meant to be used as languages, I have all along put great stress on the wastefulness of carrying on several incongruous lessons at one time. From the first statement of the Laws of Agreement onwards, I have contended for the necessity of like going with like in the same exercise.

I have also urged the economy of learning language after laying up a good stock of ideas. Setting aside the pronunciation of a foreign language, the acquisition of the grammar and the vocabulary is easier late than early; any decay in the plastic force of memory is more than made up by the other advantages.

The scheme thus set forth appears the only means of arresting the tendency inevitable at the present day to excessive specializing of the studies constituting a liberal education. It is the supposed necessity of retaining dead languages and of adopting foreign living languages as an integral part of education, that leads to options so very wide as to leave out science almost entirely from one course, and literature almost entirely from another. A mere language course, containing as it does irregular smatterings of history and of literature, is not an adequate cultivation of the human faculties; it is defective both on the side of training and the side of knowledge imparted. On the other hand, I regard it as equally undesirable to limit the course of study to science, still less to physical science (excluding

Logic and Psychology), least of all to Mathematics and Physics, The more obvious objections to the proposed curriculum may be glanced at.

First. It will be called by the dreaded name—Revolution. Yet the revolutionary element is not very great after all. It consists only in putting languages in the second place, reserving the first to the subject-matter. The scheme pays great regard to the element of the antique, as represented by Greece and Rome, and would render the acquaintance with the history and literatures of both countries, more general and more thorough than at present. A day may come when this amount of attention will be thought too much.

Second, Classics will be ruined. To this there are several answers. According as people believe the classical languages to be useful, they will keep them up to that extent and no more. But classics will never cease, so long as the existing endowments continue. A small number of persons will always be encouraged to master those languages thoroughly, so as to maintain the study of the history and literature of the ancient world. The teachers of ancient literature would be expected to know the originals; and they alone would constitute a considerable body.

Third. Some minds are incapable of science, and more especially of Mathematics, the foundation of the whole. In answer to this we may freely concede, that many minds find abstract notions exceedingly distasteful and, as a consequence, difficult. Men of admitted ability have been found incapable of mastering Euclid, while at home in languages, and in literature. In this case, however, the disproportionate pursuit of the one department has been the real obstacle. The experience of existing Universities shows that four men out of five can pass for a degree, containing elementary Mathematics. Perhaps their comprehension of the subject is not great or exact; but if their minds were more disengaged, they could understand it sufficiently to go on with a course of the experimental and other sciences, in which the interest would be more universal.

Although there are men of good judgment or practical sense, who have never had any abstract teaching, and might seem incapable of it, yet the highest order of judgment combines both abstract notions with concrete experience; and in a

thoroughly liberal education, abstract science ought not to be dispensed with.

It may be remarked finally that any man possessing a thoroughly grammatical knowledge of several languages is not wanting in aptitude for abstract science; grammar does not amount to a scientific discipline, but it attests the capability of undergoing such a discipline.¹

LIBERAL EDUCATION WITHOUT LATIN²

Let us, with something of the resolution with which we are now meeting the stern realities of war, also recognize that as a people we are deficient in the standards and attainments of liberal education as these are required to live up to the position and responsibilities which are sure to be ours in the twentieth century, as a result of this war; that ours is a conspicuously superficial culture; and that our ideals and our insight, where the genuine humanities of our day are involved, are in many essential respects lacking in depth and sincerity, and especially in the qualities of reality. As certainly as we watched from a distance the present storm mount and finally sweep us into its depths while we trembled in apprehension and irresolution, so certainly shall we again and again find ourselves in the near future unready to meet the new world problems that are inevitably to confront us. We are seriously unprepared for our coming part in diplomacy, interchange of knowledge, and the promotion of constructive programs making for international co-operation and friendliness.

How many among us can use a foreign language with precision and effect? To whom shall we look when we seek spokesmen to the Japanese, the Russians, the Chinese and the Brazilians? How few and how meagrely read are the books and journals that speak to our people of the profounder stirrings

¹ The curriculum now roughly sketched would harmonize the course of primary and secondary education, and do away with the troublesome bifurcation of the Ancient and the Modern sides, which at present complicates and embarrasses our higher schools and colleges. The work of the primary school is necessarily on the lines here laid down, and could be made still more profitable by a closer adherence to the same plan. There would be a common ground for all the professions to meet.

² Prof. David Snedden, *School Review*. 26:576-99. October, 1918.

of government, social policy and economic enterprise in those lands whose destinies are sure yet to be interwoven with our own! How little in any genuine sense do we yet appreciate the extent and character of the transformations even now steadily and rapidly taking place in the very soil from which spring those plants that we call art, literature, culture, religion, and democracy, because of contemporary diffusion and deepening of scientific spirit and method!

And yet in some respects we are the most extensively taught people in the world. In the public and private high schools of the United States are found today many hundreds of thousands of our most gifted and most ambitious boys and girls between fourteen and eighteen years of age. Our numerous colleges, founded close upon the heels of settlement in all our states, and especially colleges making no pretensions as to offerings of special vocational training, have long been crowded with young men and women, the finest products of our blended and prosperous people. America has not stinted in providing for aspiring youth the means of culture as that has been understood. In no other country has so large a proportion of young men and women been given the opportunities and incentives for all those studies which supposedly make for informing the mind and enriching the spirit—in other words, for humanism. Certainly, we can hardly rebuke ourselves for indifference, for deficiency of high intent, or for niggardliness of support in matters of what we believed to be liberal education. And it is just as certain, notwithstanding frequent allegations to the contrary, that the large majority of the hundreds of thousands of youth constantly seeking our higher schools and colleges, are not in quest, only, or even chiefly, of the education which they can turn to immediate practical advantage—in the narrowly utilitarian sense.

Nevertheless, in spite of good intentions and an abundant provision of material means, our agencies of liberal education have, I believe, conspicuously failed to meet the needs of our nation in this age. They have left us in a state of intellectual and spiritual unpreparedness. Why? Largely, I contend, because those to whom we have entrusted the direction of our institutions of higher learning have had no adequate understanding of the meaning and character of liberal education as that must be developed for the needs of a dynamic civilization

expanding and deepening into the twentieth century, a civilization carrying along growing aspirations for democracy, for harmony among peoples, and for profounder understanding of the essential things of the present and the future. At a time when all the vital elements of political, religious, economic and cultural life were being reshaped by forces of incomprehensible magnitude and complexity, many of our strongest educational leaders have continued to prostrate themselves before decaying shrines of the past. With good intentions, but bad performance, they have, in the name of an unsound psychology and a false pedagogy, constituted themselves the voluntary defenders of a static social order. With eyes aloof and minds closed to the realities of present and future, they have ever tried to hold the thoughts and aspirations of their disciples to the departed glories of a Greece or a Rome, to the culture of a thirteenth or sixteenth century, on the assumption that these, and these chiefly, exemplify the high and noble things of spirit and mind which should be the foundation of all fine learning suited to a modern world.

For generations, and almost unto yesterday, they caused the dead hands of Latin, Greek and mathematics to hold in leash and often to paralyze the aspirations of our youth to share in the appreciation, and perhaps to aid in the creation, of cultural products significant of our New World character and opportunities. Millions of American boys and girls, the best of our stock and of our democratic social life, have come gladly up to our schools, naively seeking the bread that would nurture them in the idealism and achievement of modern America; and to them has been given—what? Shreds and scraps of two complex ancient languages that were never to become really intelligible to most of them, and could not, in the very nature of the case, become more than slightly intelligible, except to a very few, and which were destined to be, in ninety-nine cases out of every hundred, almost completely forgotten within ten years of the closing of school life. Accompanying the prescribed and often meaningless studies of the grammar and composition of these languages, were also studies, hardly less pitiful, of classical texts, to the elucidation of which the less scrupulous students have helped themselves by the ever-ready interlinear. Hundreds of thousands of our youth have toiled reluctantly line by line through the *Anabasis* and millions have painfully

translated Caesar's Commentaries—splendid bits of composition in themselves, but about as significant to the realities of a nineteenth or twentieth century as bows and arrows would be in modern warfare, or Roman galleys in the naval contests of tomorrow. Our educational conservatives have been industriously trying to gather figs of liberal education from the thistles of the classics. They have turned their eyes so constantly backward that they have themselves eventually become incapable of seeing clearly the realities of present and future. They have never learned that the twentieth century was eventually due in education as it was obviously arriving in science, economic achievement, social economy, medicine, engineering, and agriculture.

It was inevitable, of course, that as America found itself politically, economically, and socially, it should try to free itself of the obviously useless trammels of the past. Classical studies in schools and colleges have therefore become more and more vestigial. Boys and girls by hundreds of thousands, and usually those of superior ability and home environment, still elect the skeletonized Latin offered in public high schools, because of the possibility that they may want to attend those strong, endowed institutions whose social connections, wealth and historic strength enable them long to resist the modernizing influences to which institutions more closely in touch with the spirit of the age and more responsive to the will of democracy have in part yielded. Almost universally in our private schools, and still quite generally in our public schools, American youth study and recite in perfunctory spirit the meaningless rituals of Latin Grammar and Roman classic. But there rarely results any genuine interest in either the ancient language or its so-called literature. The wholesome common-sense characteristic of Americans soon asserts itself. Half contemptuous, half tolerant, and wholly uninterested, and an easy victim to the dishonesty of the "pony," the boy passes his antiquated tests for admission to the college whose social opportunities mean so much to him. He promptly relegates to the lumber-room of his mind the broken antiques with which misguided teachers have tried to equip him. The colleges (a steadily diminishing number, however), having exacted the ancient ceremonial observance, now usually permit the youth to proceed in freer ways toward his degree.

But if the study of Latin has degenerated to the vestigial position here indicated, why the strong opposition manifested against it on the part of those who call themselves liberals in secondary and college education? The exactions of time and energy imposed by the stated amounts of Latin now required by even our more conservative institutions do not seem excessive. A minimum of from one to two thousand hours of study and recitation given out of the lifetime of an individual to an enterprise of learning with such honorable antecedents (in former centuries) as the study of Latin surely seems no great sacrifice. The college admission requirement against which we inveigh rarely demands more than one-fourth of the learner's time through a four-year secondary school course.

It ought to be obvious that, in the main, the motives of those who seek to remove Latin from the list of the specific prescriptions required for any high school course, or for candidacy for any liberal arts degree are not founded on mere prejudice or utilitarianism. It is, of course, an easily made charge that the so-called opponents of Latin—who are in reality only opponents of the monopolistic position accorded at present to Latin—are interested only in bread-and-butter education, that they are lacking in devotion to the ideals of culture, that they are infected with the anarchistic spirit of the age which would cut loose from the moorings of established institutions and inherited traditions.

It is not part of my present purpose to reply to these criticisms. However well founded they may be in the case of a few opponents of Latin, they do not apply to the many students of education whose attitudes have been formed only as a result of extensive comparative study of the possible and desirable objectives of all advanced instruction and training.

Those of us who disapprove the present protected position of Latin as a secondary school study, a position made possible only by the requirements imposed by powerful institutions of higher learning, do so for the very fundamental reasons, that, in the first place, the insistently repeated allegations as to the educational values of Latin as now taught, are in fact, without demonstrated validity, and, that, in the second place, Latin, as an artificially protected study, stands as one pronounced barrier to the development of truly effective liberal education suited to the genius of the American people and to the needs

of a twentieth century democracy. We contend that to give any study in a system of liberal education a sacrosanct and artificially protected place on half mystical and wholly traditional grounds, is to corrupt the sources, and to invalidate the methods, of all true liberal education from the outset. The values pretended to be found in the study of Latin impress the scientific person who thinks in terms of present and future results as being like the meaningless mummeries and symbols of religious rituals that have long outlived the period of their vitality. These alleged values rest actually in part on old customs of little present worth, in part on mere stubborn devotion to the ancient for its own sake, and in part on the rewards always to be won by clever exploiters of the credulity of those whose faiths are easily enlisted in the ultra-modern or ultra-antique.

What curious defenses are still conjured up in defense of the classical studies and especially on behalf of that clinging "dead hand" study, Latin! All educators of any breadth of view appreciate the unequalled importance of the "humanities," those studies designed to lead the minds and spirits of our growing youth to apprehend the things that have fine and big messages of human possibilities and achievement. In a broad and real sense the "humanities" are always to be cherished as vital studies in any plan of liberal education. But are we to delude ourselves into thinking that the slow and perfunctory dissection of a few classical works of literature, produced by great minds that lived in regions and times the thoughts, feelings, and aspirations of which are almost inconceivably far removed from ours, could serve, except in one possible instance in a thousand, to produce the kinds of insight and appreciation that are properly to be begotten of those studies which we may sincerely call the humanities?

Again, we are solemnly assured that through the study of these ancient languages and the few easily available examples of their literatures, there is produced a kind of magic mental discipline, a unique kind of sharpening of the mental faculties, not to be found in studies of other languages or literatures, nor in other subjects based on the realities of our own day and generation. As if the living gymnastics of mind were not best to be secured through those activities of mental and spiritual apprehension and action which come from strong efforts to

possess and to control the realities of habit, knowledge; and ideal that have worth for today and for tomorrow!

We are told, too, in words of well simulated profundity, that contemporary civilization has its roots in the old civilizations which flourished in the Italian and Grecian peninsulas, and that it is through study of the surviving desiccated examples of those cultures that our youth are best able to gain access to the more complex cultures of our own times. As if any sound system of pedagogy should or could have the unformed mind make its first essays in fields that are so remote in time and place as still to be largely unintelligible!

We are also assured that some knowledge of Latin is essential to the mastery of English or of a modern foreign language. But here again, we are given no evidence that makes allowance for the great selective forces operating in schools as heretofore conducted. Many a self-educated Lincoln or Walt Whitman has given us fine virile English; and certainly thousands who have made good records in Latin and Greek have later given us English that is but as hollow brass and tinkling cymbal. We know too little yet of the psychology of good language training to speak with confidence of these matters. If, as a partial results of the numberless hours given by our youth to the study of the classics since colonial days, we could point to prevalent forceful and fine vernacular usage as one accomplishment, and to some real mastery of modern foreign tongues as another, there would at least be ground for shifting the burden of proof to the opponents of the monopolies long accorded to Latin and Greek and still held by Latin. But, in reality, we exhibit among our college-educated classes no such achievements that are not equally to be attributed to the superior home environments and to the opportunities and exactions of the social positions of these more favored groups. Any critical analysis, even in the light of our present uncertain educational science, of the valuable objectives and useful methods of language training, either in the vernacular or in a foreign tongue, must always strengthen the convictions of common sense that direct investment of available time and energy in the positive and specific pursuit of the actual ends we desire is the best investment we can make.

Finally, we are told that students who elect Latin in our schools reveal themselves later as having better minds than

those who do not take Latin, and that as men and women they succeed better along almost all lines. But to those who realize the forces of selection always operative among parents and even among children themselves, the inferences usually drawn from these facts represent the baldest kind of reasoning "*post hoc ergo propter hoc.*" There is much evidence indeed that heretofore, and even yet, pupils electing courses containing Latin are natively superior to those who do not make such elections. Parents aspiring after the best for their children do not set themselves up as experts in determining values of studies. Naturally, they accept the judgments of the higher institutions, and, in matters in which confessedly they have little knowledge, they prefer to abide by respected custom and tradition. But there exists as yet no available evidence to show that, even in mental powers, as judged by ordinary standards, the superior students found in Latin owe their superiority to their Latin studies.

It is not here contended, of course, that other secondary school studies, as now administered, give results superior to Latin. Practically, viewed from the standpoint of the needs of our age, our entire program of secondary education has been stricken with the blight of blind traditionalism and formalism. Mathematics, the one other subject apart from English that enjoys a monopolistic position like that held by Latin, supplies to most of the girls and to many of the boys obliged to study it, probably nothing more substantial than intellectual husks. French and German, as now taught, are, when judged by the standards of interest and mastery that should characterize a truly liberal education, largely cultural shams. High school sciences, long ago placed under the bondage of a pedagogy derived from a now obsolete theory of mental faculties, have become bankrupt as means of giving genuine appreciation and insight to the mind that must interpret well or ill the scientific social inheritance of the 19th century. Even history and English literature, largely because of faulty aims and method have so far failed to yield to our millions of youth the riches of humanistic vision and sentiment which ought certainly to be derived from these studies when pursued under right conditions.

What we now need is someone to speak to us with the voice of a trumpet the message which seems long ago to have been heard by young Athenians—that has everywhere been heard

by generous youth destined to add to the spiritual possessions of their age—namely that as a strong people, our best opportunities to develop new strength, to do creative work, are here and now. We must learn to build for today and the future, and to turn to the past only when, in any given case, we shall have planted our feet firmly on the rock of the living present and the nascent tomorrow. Let us as a nation take due pride in the achievements of our forefathers and ourselves, and at the same time earnestly resolve yet farther to enrich humanity by our efforts.

America's contributions already made to the social inheritance of the modern world are neither meagre nor unimportant. Our democratic ideals of government and social life, our scientific mastery of economic forces, our steadily forming conceptions of community well-being—these constitute social assets fundamental to all other forms of social evolution and in all of these we have played our part as explorers, inventors and master builders.

It is now our opportunity and our obligation so to organize existing educational and other agencies of culture that here too the American people may be strong and creative. The feet of many of our gifted young men and women, given right incentive, can be turned into the paths of humanistic leadership just as certainly as were those of creative men and women in the virile and forward looking epochs of the past.

But to achieve these results we must develop in the fields of liberal education the conditions which have made the American people originators in the spheres of politics, mechanical invention, and business organization. We must cease to make ourselves dependent on the past, except as we perceive its possible service to present and future. We must encourage our youth during their plastic years to look about them and forward in the world of vital realities for objectives, and to look within themselves for incentives to action. They must learn to adapt with caution, and not at all flatly to imitate the work of those who lived under conditions very unlike those which prevail today. They must learn that we live in an age as unlike those of Athens or Rome or 15th century Florence, as are the topography and climate of the Mediterranean shores unlike the great geographic reaches and tremendous meteorological alternations of our own continent.

The great war more than ever impresses upon us as a people that if we are to fulfill our destiny, we must cultivate originality. We must in every possible way seek out the inventive spirit among us and give to that endless varieties of encouragement and positive incentive. We must cease to be worshippers of *temporis acti*. Our Golden Age lies in the future and in prospecting our way towards it, we can, when we are sufficiently mature, and in exceptional instances, borrow even from the records of the journeyings of Xenophon or the quests of Ulysses. But we must borrow with restraint and discretion; otherwise, our aspiring youth will become bemired in the accretions of ancient history.

The intellectual and spiritual assets wherewith the American people have entered the twentieth century have certainly never been equalled. Our economic control of nature has made us by far the wealthiest of nations in point of material resources, and these constitute the essential foundations, if we use them rightly, for the leisure, the appreciation and the education through which less tangible values are to be realized. Our one hundred million people constitute a population homogeneous and co-operative to an extent never yet equalled elsewhere.

But the faith of our people in education and their disposition to support it is the greatest of these assets. In 1915 over 1,500,000 of the adolescent youth of this American people were studying in our public and private secondary schools. Over 250,000 young men and women were in our colleges. These hundreds of thousands represented the best of aspiring America. They are, to the extent that their schools and their surroundings are capable of inspiring them, eager to serve their country and time. They have acquired a kind of frankness and vital interest in realities that we think of as American. They are not easily subjugated to the traditional just because it is traditional, but neither are they at heart irreverent towards ancient or great things when the ancient is really significant and things alleged to be great (for present or future) are such in reality. They do not reverence authority as such, for they see in submission to authority a means and not an end to the truly democratic life.

Utterly without foundation is the carelessly made charge that these young Americans are preoccupied with sordid ambitions for money or position. True, each boy or young man,

and, equally, be it said to their credit, each girl and young woman, now looks forward to the day when he shall be able to render through some suitable vocation valuable service to the society which has nourished him. As a means to fullest serviceableness in this vocation, he desires and actively embraces at the right time, genuine vocational education; and in some collective capacity America is now disposed to expand opportunities for vocational education as supplemental to the general or liberal education which our regular schools have heretofore offered. Much as we aspire to a due measure of leisure for all, we do not approve the ideal of a leisure class as such. We are too familiar with the close connections heretofore obtaining between leisure classes and a prevalent sensual aestheticism and moral degeneracy.

These clean-limbed, open-minded youth of ours—are we to believe that they have only inferior capacities for higher idealism, for the development of that new humanism for which the twentieth century calls? It is the proper function of education to help face these adolescents towards the future. This is no static civilization of ours. We are not seeking to remain eternally on the same level. We have learned the inevitability of change, of evolution, and we have begun to feel, if not yet clearly to perceive, the possibilities of controlled evolution.

What is the problem before the educational institutions of America? It is, let us repeat, to provide on behalf of our youth, the genuine means of a *liberal* education that shall be adapted to our age, our people, our circumstances. What would the best of the Athenians of the age of Pericles do were they in our place today? Would they try to find in forgotten tongues and antiquated fragments of literature the culture, the idealism, the mental disciplines that will transform plastic youths into citizens strong to uphold the state, to advance up the slopes of intellectual inquiry and of appreciation of the possibilities of conscious co-operative direction of social forces towards the higher goals that the purposeful discovery of the future will reveal to us?

Let us first try to interpret what is undoubtedly in America today a very well-developed, even if only partially articulate, spirit of humanism—using that term in a legitimately modernized sense. It is not possible for us to locate the gods behind the summit of Mt. Olympus. To us they are abroad in our

own land and among our own people, and the effects of their wills are everywhere manifest in our own day. In many of the most important matters of life our attitude and outlook are almost inconceivably different from those of the Greeks and Romans. Slavery and all other forcible subjugations of the body and spirit of man, not required for the general social well-being, have become things abhorrent. Moral degradation, poverty, and all the other sources and concomitants of low efficiency, of undemocratic competition, and of persisting unhappiness, are steadily being repudiated by the social conscience of our time. More keenly than ever do we perceive the needless horrors entailed by aggressive war, the disease-like character of crime and immorality, and the social wastage resulting from lack of knowledge and skill. A constantly increasing proportion of our people are steadily striving towards the day when within our borders may be found a vast and a thriving population, keenly appreciative of all the sources of light and fine sentiment that help to make life richer and purer. To the attainment of these conditions we more than ever perceive the need of originality, of science, of the development of the best humanistic ideals and means.

We begin to understand our responsibilities for developing types of citizenship that Greece or Rome could not possibly conceive. It is our conviction that in a democracy, it belongs to all to assure to each the right to be socially efficient in all ways—culturally and morally, no less than physically and vocationally; and to enforce the performance by each of the duties which inevitably attend and complement rights. America sets the world high example in its persistent demands for increasingly wholesome family life, a better position for women, a fair start in life for all children. We are striving towards the time when in a purposeful way we may use all forms of fine art to the fullest extent that is possible in our day and generation as instruments of control, development, enrichment of life. We certainly see much farther into the things of society than did or could our Greek or Judean or Roman or Teutonic forebears. We have now the means of developing, as they could not, things of the mind and things of the spirit.

The new aims and methods will have to be developed in large part experimentally by educators who are well grounded in psychology and sociology. It is improbable that these experi-

menters will fail to make full use of the valuable materials to be found in existing customs. Like the Pasteurs, Edisons, and Lincolns who, in other fields have wrought to new achievements, they will gladly take from past practice or surviving custom the light that will help them on their way. All they ask is that their efforts be not blocked by vested interests and protected faiths. There is no credit to a civilized society in allowing prejudice and blind conservatism to visit death on a Socrates, ignominy on a Columbus, and disheartening obstruction on a Pasteur. The experimental schools of tomorrow—and we must and shall have scores of them—ought to be given the freest possible scope to develop and test new and varied objectives and the means of realizing them.

In a few essential respects, it is certainly even now practicable for the student of modern education to predict some probable developments in the new liberal education.

For the adolescent youth the processes of that education will involve reasonable amounts of the sharpest and sternest discipline—discipline of powers of body, of mind, and of moral character. But the youth himself will certainly be an appreciative and informed party as regards the ends of these disciplines. He will not usually need to be driven in fear, or be invited to proceed in blind faith, because the valid worth of that which he must do will be a matter of generally understood demonstration. Like the Athenian youth whom we delight to recall, he will be trained, and trained hard if necessary, in those powers that have a visibly functional place in society as it is today or will be tomorrow. No longer will he be obliged, in the name of an obsolete pedagogy, to subject himself to disciplines which, like the nostrums of mediæval medicine, could rarely be taken by intelligent persons except in a spirit of uncertainty and misgiving.

We are indeed learning to be ashamed of that devotion to educational "simples" which in our secondary education deluded us into thinking that a year or two of work with algebra and geometry by adolescents who would later make no vocational use of the knowledge acquired, or four years of indifferent study of a classical language, with its resulting meagre grasp of literary selection, read often with the furtive aid of ponies, can give for our day and generation the foundations of the powers which we idealize as intellectual discipline. We are

learning the futilities of that misleading and mechanical pedagogy based upon a metaphysical and unscientific psychology which thinks to find in Latin and algebra intellectual philosopher's stones—to find in the mummified studies, quite divorced from all the realities of mind, spirit and body as they belong to our day and generation, precious means of nurture for mind and spirit.

But the new liberal education will achieve only part of its results through the rigorous processes of hard discipline. It will provide also for many forms of growth through appeals to native interest, ambition, and instinctive good will. It will discover a pedagogy suited to the easy evoking and establishing of appreciations and ideals of approved worth. It is a widespread error of educators of the older type that schools rated good by current standards develop appreciation, tastes and ideals generally through the exercises of the classroom. This happens occasionally for the rare pupil under an average teacher and for many pupils under the exceptional teacher—that one teacher out of a thousand whose native genius can make even mathematics or Latin fascinating. But these finer qualities are much more often the by-products of the school life, the residual effects of play, social intercourse, and miscellaneous reading. The secondary school of the future will have a splendid opportunity to extend and render more effective these forms of education of which the disciplinarian and taskmaster knows little and often cares less. A new type of schoolmaster must arise who can comprehend the significance in true cultural education of self-inspired work, leisurely development of tastes and abiding interests, and the richness of inspired social intercourse.

Much light is now being shed on the problems of developing a functioning liberal education through the progress recently made in defining the ends and means of effective vocational education. Heretofore, all education except the vocational education designed to prepare for a few professions, has been vaguely assumed to "fit for life"—in the vocational no less than in the cultural and civic sense. Faculties of liberal arts colleges have solemnly defended the thesis "a college education pays" when business men, moved only by considerations of vocational efficiency, have challenged them. That a college education might well "pay" on grounds wholly other than voca-

tional—and pay both the individual in culture and the other abiding satisfactions of life, as well as society in the higher type of citizen produced—should be a highly defensible thesis. But endless confusion results when the objectives of vocational education and of liberal education are confused, or when it is assumed that the same means and methods will serve equally the ends of each. Vocational education in any properly delimited meaning of the words must have its processes, its means and methods strictly determined by the requirements of a known calling—and in the modern world these tend to proliferate and multiply along lines of specialization to an almost indefinite extent.

Fortunately, we now see that we cannot effectively "vocationalize" education by offering in a high school or college a few elective studies or courses of an academic nature, with a slight accompaniment of laboratory illustration or practice. We have been attempting this in numberless cases with agricultural, industrial and commercial education—and even with home economics, journalism, business administration, teaching and social work. Only recently are we coming to perceive the great wastefulness and futility of it all. We are certainly destined soon to have a system of vocational schools, the vestibuled approaches to the thousands of vocations now found in civilized society, but these schools will be as definitely differentiated from schools of general education as are now colleges of law, medicine, dentistry and military leadership. We may expect then that the functions properly belonging to schools not vocational in purpose will be revealed more clearly. With this knowledge, we can proceed to devise the most effective general or liberalizing education for those thousands who must or will close their general school in their fourteenth or fifteenth year; for those other thousands, more fortunately situated, who can give from one to four precious years to the liberal education offered by the secondary school before embarking on the study or practice of a specific vocation; and also for that minority who usually combine much native ability with fortunate home conditions who aspire to a "college degree" before taking up the study of a profession. Here lie our opportunities to differentiate the ends and to determine the means of genuine liberal education.

Among its larger objectives this liberal education must

develop and conserve for present and future generations in those who are to lead, attitudes of intelligent hopefulness, and faiths in human improvement and all that we call progress. Toward other peoples and toward peoples of different qualities in our midst, it must stand for increase in sympathetic understanding and mutual helpfulness. As regards the great social inheritance of knowledge, customs, and institutions which we have acquired from the past, its spirit should be appreciative and discriminating, based on the conviction that some things, and some things only, of that inheritance have a vital, a functional significance for the present and the future.

Among the more specific results of a better liberal education, we trust that the men and women in the future will exhibit a finer and stronger command of our wonderful mother tongue than is now the case. A good command of the vernacular is indeed among the vague ideals of our schools of liberal education now, but the means to their realization of this are seriously ineffective. We have every right to expect the discovery of educational means whereby education toward desirable mastery of English can steadily be improved. There exist beliefs—shall I say 'superstitious' beliefs (certainly they rest on no adequate evidence)—that study of one or more alien tongues is a highly desirable, if not necessary, condition of sound attainments in the vernacular. But with English steadily evolving toward becoming a world language, we can have confidence that a fine command of it is possible under right methods of training, even to those who have secured no power over another language.

It will readily be understood that well-developed insights into, and appreciation of, English literature must also count as an indispensable element in the liberal education of all our young men and women. But this is not to be interpreted as including only study of those portions of English literature which are held to be classics. Too often the older vernacular literature, like the ancient literatures in other languages, possesses no functional value in inspiring youth to seek to interpret and to share in the control of the social and cultural forces of the twentieth century. We must include appreciations, understandings and evaluations of all that literature which is each year in process of being made—and which, in a collective way, often voices the aspirations and the forming social attitudes

of the peoples and times in which we live. Of course, at present we know little of the best means and methods for the direction to such study; but they are certainly discoverable.

Next in importance to the English language and English literature as means of liberal education, we should place the social sciences, as these can be adapted to lay secure foundations of insight and ideals for good citizenship and fine human aspiration. But here again we must discard the traditions that have heretofore bound us to the ancient and the remote. History, that great encyclopedic massing of data for the social sciences, must be made a subject of reference, not something to be studied for its own sake in chronological order by those youths who are laying the foundations for genuine humanistic culture. Students must first acquire concrete experience and definite knowledge through vital contact with the significant realities of the living present; then, as occasion offers, and needs of interpretation and perspective arise, they will be turned toward those things in history that demonstrably do function in better appreciation or understanding of the things of today, tomorrow, and next century. The range and variety of problems to be solved by the citizen of a progressive democracy in the twentieth century are great indeed; and that can be no true culture, no true humanistic learning, which does not with sureness of aim and precision of method inspire and train the adolescent for their solution.

Few will dispute the claim that in a modern scheme of liberal education a large place should also be given to natural science. The science subjects now found in our secondary schools and, to a large extent, in our liberal arts colleges, have rarely contributed in any genuine way to culture. They have suffered somewhat from the opposition of the former defenders of the classics but still more from their misguided friends who would, on the one hand, make them Cinderellas in the interest of vocational competency or else sharp drillmasters of "scientific method" and the mental discipline supposed to be derived from an intellectual "cure-all." Wholly new objectives and wholly new methods are needed in natural science teaching. Some successful experiments pointing ways to these are to be found even now. No one awake to the larger possibilities of liberal education need doubt that the natural sciences—those sources of insight and aspiration that have largely made the

twentieth century, for good or for ill, what it is—can yet be made vital means of liberal education.

There remain the fine arts of music, painting, and sculpture. Our schemes of so-called liberal education give little or no place to these today. But should not purposive development of taste and insight here be given prominence in any generous project for liberal education? Certainly discriminating and catholic appreciation of these fine arts constitute a large element in culture as best understood and defined. No less, certainly, when once the valid objectives of a functioning liberal education shall have been determined, we shall find appreciative studies of the fine arts given high rank among the means to that end.

What do we desire with reference to the classics in our schools and colleges? Only this: that they shall be accorded no special favors, given no artificially protected position. We wish the field of higher education to be made as open as possible to the end that in its very effort to devise, invent, and create the means of a liberal education adapted to the needs of our time and opportunities, we shall not be hampered by the dead hands of useless tradition, the old inertias and controls of an age that saw in a static civilization the highest of all earthly glories.

Do we wish to prevent the study of the Latin, and especially of the Greek, language and literatures? Assuredly not! For those with genuine interests in such studies, every facility should be afforded in schools and colleges that can obtain enough students to justify the expense. And we hope that, given fewer students and the genuinely interested, such studies might become, for a few at any rate, genuine wellsprings of interest, appreciation, and insight—something which is far from being the case at present.

We earnestly desire that the great languages and literatures of Greece and of Rome, and of every other age that has enriched the world, shall be the objects from time to time of careful inquiry and developed appreciation by persons mature enough to serve as interpreters of these treasures to each succeeding generation. We believe that from age to age in the light of our own added knowledge and developed experience, these languages and literatures will still continue to make their contributions, as will, in somewhat similar measure, ancient Irish lore, the sagas of the European northwest, the philosophy of India, the religious writings of Confucius, and even the mythology of

our own North American Indians. To none of these sources of inspiration can a country like ours in its future evolution be completely indifferent. From time to time, we shall expect aspiring spirits to visit these faraway lands and to bring back some treasures fit for the adornment of our temples. For these purposes, however, we shall require no compulsory study of these ancient languages in our secondary schools or our colleges. Much more profitable will it be for us that individuals themselves take the initiative from time to time in making the necessary explorations.

In fact, a large part of the liberal education offered, even in the secondary school, will consist in the deep plumbing of a few intellectual or aesthetic fields in which the candidate has native interest and power. Under a yet to be developed system of educational guidance, each learner will be induced, as part of this liberal education, to select some one field of culture and to make of that a life interest. Among these might well be: Greek language and literature; 17th century English literature; modern Japanese language, history, and literature; violin music; architecture; "natural history" of a given region; some branch of social science; eugenics.

The foreign languages, ancient and modern, and mathematics—what place will finally be reserved for these subjects which, despite frequent allegation to the contrary, now compose the heavier part of practically all programs of secondary education designed as preparation for college, soley because of their supposed value as apparatus for mental gymnastics? It is perhaps too early to say with confidence. Algèbra and geometry will unquestionably hold a strong position in the prevocational training of those who have reasonable expectations of entering vocations using mathematics as an important instrument. A few other persons may be expected to elect them through sheer native interest in the special intellectual activity and the particular insight which such study affords. We shall hope and expect, too, that in addition to those who study for probable vocational use, a modern language, others may be induced to give the toil and enthusiasm required to beget that mastery of French, or Japanese, or Russian, or Spanish, which shall enable the fortunate possessors thereof, like generous amateur musicians, to be sources of appreciation and insight in circles where they move, as well as translators—in the larger sense of the term—of the good will and intellectual riches

of the peoples whose culture has become accessible to them through the mastered language. In somewhat similar process may we also expect, as elsewhere suggested, fine spirits to prepare themselves, from time to time, to journey intellectually in quest of treasure still to be found behind the linguistic walls of Greek, Latin, Sanscrit, Erse, and Inca writings.

To make these things possible in education, much will yet be needed of courage, faith, inventiveness, and labor. But these are even now extensively enlisted in support of many progressive movements and experimental developments. One immediate step that will help much is an educational declaration of independence which will release the grip of one of the few surviving relics of old-world tradition—a declaration of independence from the grip of the Dead Hand of Latin.

SOME EXPERIMENTAL DATA ON THE VALUE OF STUDYING FOREIGN LANGUAGES¹

The value of studying foreign languages, aside from the direct use of the modern languages, has been very much overestimated in some quarters and perhaps equally underestimated in other quarters. The controversy over the amounts of pure intellectual discipline of the various branches of instruction has been the warmest in the field of languages, particularly the ancient ones. As a matter of fact, however, the controversy could be just as animated in the field of the sciences, when one recalls the distorted claims of discipline made for them in certain quarters.

This article will present some definite data on the amount of disciplinary or derived value of certain aspects of studying foreign languages. It is not claimed to present a complete measure of one or of all phases of such study, but it is certain that definite objective facts and measurements are far superior to individual opinions based on haphazard instances.

Scholastic records of students presenting different languages for college entrance.—The first problem considered was a comparison of the scholastic records of university students who had entered the university with two to four years of Latin with

¹ Prof. Daniel Starch, *School Review*, 23:697-703, December, 1915.

the records of those who had entered with two to four years of German. The average grade for the four years of college work of each of the graduates of the College of Letters and Science of the year 1910 was computed. The median mark of the 104 students who had entered the university with Latin was 85.7 and the median mark of the 45 students who had entered with German was 84.0. Hence the difference between the two groups is only 1.7 points.

The explanation for this small advantage of Latin over German may be sought in three directions: First, the disciplinary difference between Latin and German is either zero or very small. Second, whatever difference they may have produced originally may have tended to disappear in the four years of college work, owing to the freedom of electives, pursuit of different courses, disciplinary effect of other studies, etc. Third, the small difference in scholastic records may be due to an original difference in the students themselves, owing to the possibility that one language may attract a better class of pupils than another. It seems very probable that if any real difference exists it is due chiefly to the third reason.

To determine what part, if any, the first two factors played, the average grade of each of the 738 Freshmen of the year 1909-10 was computed. The median grade of the 416 Freshmen who had entered with Latin was 82.4 and that of the 322 Freshmen who had entered with German was 81.0. Hence the difference between the two groups was only 1.4 points, or approximately the same as that for the graduates.

The next problem was to compare the grades of these two groups in specific subjects as follows:

Median grade in modern languages of 362 Freshmen who had entered with Latin.....	84.5
Median grade in modern languages of 293 Freshmen who had entered with German.....	82.3
 Difference in favor of the Latin group.....	2.2
 Median grade in Freshman English of 54 students who had entered with Latin only.....	83.9
Median grade in Freshman English of 97 students who had entered with German only.....	82.7
 Difference in favor of the Latin group.....	1.2

Median grade in first-year French of 27 Freshmen who had entered with Latin only.....	81.5
Median grade in first-year French of 34 Freshmen who had entered with German only.....	82.0
Difference in favor of the German group.....	0.5

The differences again are very small. The claim of language teachers, so commonly made, that beginners in French who have had Latin are much superior to those who have not had Latin, or that students in English with previous training in Latin are superior to those without such training is ill founded. It is another example, so common in educational thinking, of generalizing from striking, isolated cases. What differences do exist are due primarily to the selection of students. The pupils who entered the university with Latin were on the average better, but only slightly better, pupils before they studied Latin than those who undertook German. The traditions in many high schools have been such that somewhat better pupils have tended to select Latin.

Another tabulation (Table I) was made to show the scholarship records of Freshmen in relation to the amount of foreign languages studied, irrespective of what the languages were.

TABLE I

Years of Foreign Languages	Number of Students	Median Grade in All Freshman Studies
0.....	25	81.8
1—2.....	224	81.9
3—4.....	195	83.05
5—6.....	155	84.0

Effect of studying Latin upon the size of one's English vocabulary.—The next problem was to measure the extent to which a pupil's English vocabulary is increased through the study of Latin. The method employed for determining the size of a person's English vocabulary has been described elsewhere and hence will not be discussed here.¹ Suffice it to say that the method employed measures the percentage of the entire English vocabulary, as well as the approximate absolute number of words whose meaning a given person knows sufficiently well to use them correctly. The test was made with 189

¹ D. Starch, *Educational Measurements*. Macmillan.

university students and with 46 Juniors in the Madison High School.

	Per cent
Size of English vocabulary of 139 university students who had studied Latin.....	60.9
Size of English vocabulary of 50 university students who had not studied Latin.....	58.2
Size of English vocabulary of 14 high-school Juniors who had studied Latin.....	54.7
Size of English vocabulary of 32 high-school Juniors who had not studied Latin.....	50.2

The differences between the Latin and the no-Latin groups are surprisingly small. One of the reasons commonly urged for the study of Latin is its tendency to increase the student's English vocabulary. The difficulty in the situation lies in the fact that, while many English words are derived from Latin sources, the meanings of the English words are often so warped or distantly derived that it is necessary to learn the specific meanings. Simply to recognize that "boaconstrictor" contains the root *constringere*, "to draw together," will not teach a pupil that it means a certain kind of reptile. So far as the root-meaning is concerned, the word might have been applied to scores of things that contract. This point was brought out forcibly by the students on whom the test was made. The Latin students recognized in many instances the presence of Latin roots in the English words used in the test, but they could not be sure of the specific meanings without having definitely ascertained them. In many instances they would ascribe, by inference from the root-words, entirely erroneous meanings. Nevertheless the study of Latin does produce an appreciably larger English vocabulary. This advantage becomes less in university students, with whom it is partly counterbalanced by the increase in vocabulary due to wider experience.

Effect of studying foreign languages upon knowledge of English grammar and upon correctness of usage of English.—The final problem was to ascertain to what extent the study of foreign languages increases a pupil's knowledge of English grammar and to what extent, if at all, it increases correct use of the English language. The methods by which correctness of usage and technical knowledge of grammar were measured

¹ *The Measurement of Ability in Reading, Writing, Spelling and English.* The College Book Store, Madison, Wisconsin.

have been described elsewhere.¹ In brief, the test for usage consisted of a set of one hundred sentences, each of which was stated in two ways. The task of the pupil consisted in indicating the correct forms. Technical knowledge of grammar was measured by certain tests involving the designation of parts of speech, cases, tenses, and modes. These tests were made upon 54 university Juniors and Seniors and 146 high-school pupils. They gave the results shown in Table II, in which the scores for knowledge of grammar are the numbers of the parts of speech, cases, tenses, and modes indicated correctly in a specified period of time, and the scores for correctness of usage are the numbers of sentences designated correctly in a specified period of time.

TABLE II

Years of Foreign Languages	Number of Students	Average Scores for Knowledge of Grammar	Average Scores for Correctness of Usage
UNIVERSITY JUNIORS AND SENIORS			
0.....	2	48.0	81.5
2—5.....	12	47.8	71.1
6—9.....	25	58.6	75.5
10—15.....	15	63.4	75.7
HIGH-SCHOOL PUPILS			
0.....	12	14.7	32.2
8 weeks.....	50	20.8	43.0
1 year.....	18	25.5	43.4
2 years.....	39	24.8	45.9
3 years.....	27	28.6	47.7
UNIVERSITY JUNIORS AND SENIORS			
Years of Latin			
0.....	15	45.8	70.9
1—3.....	11	56.1	75.7
4.....	14	57.5	74.3
5 or more.....	9	61.8	76.1

Another test for correctness of usage, consisting of sentences like the set of one hundred, but arranged in the order of increasingly difficult steps, was made on another group of 146

university students and 92 high-school pupils. This test yielded the highest steps passed. The higher the score is, the greater is the ability of using English correctly.

These tables agree in showing one very significant result, namely, that *the study of foreign languages materially increases a pupil's knowledge of English grammar but only slightly increases his ability in the correct usage of the English language*. Notice, for example, the upper part of Table II. The students who had 10 to 15 years of foreign languages made a score in grammatical knowledge of 63, as compared with a score of 47.8 made by the students who had 2 to 5 years of foreign languages, a difference of 32.6 per cent in favor of the former group. For correctness of usage, the corresponding difference is only 6.4 per cent. The two students with no foreign languages made high scores because they were exceptionally good students, but they are too few in number to be considered. The high-school pupils show a gain in grammatical knowledge of 37.5 per cent from the 8-week group to the 3-year group and a gain in usage of only 10.9 per cent. The 12 pupils with no foreign language made low scores because they were exceptionally poor pupils. This is indicated by their low scholarship records, by the fact that many were over-age, by the fact that they

TABLE III

Years of Latin	Number of Pupils	Average Scores
HIGH-SCHOOL PUPILS		
0.....	47	10.1
1—6.....	99	10.2
UNIVERSITY STUDENTS		
0.....	78	9.0
1—4.....	14	9.3

avoided the foreign languages, and also by the large difference between their scores and those of the 50 pupils who were just beginning foreign languages. Eight weeks of foreign languages could hardly have produced such a big gain. Their higher scores must be due to a difference in original nature. The same facts are brought out by the comparison for Latin alone. The gain of the 5-or-more-year group over the 0-year group in

grammatical knowledge is 34.9 per cent and in correct usage only 7.3 per cent. Latin obviously has no advantage over any other foreign language in increasing grammatical knowledge or usage of English.

Incidentally the implication may also be pointed out that knowledge of grammar has very little effect upon correct usage. The large increases in grammatical knowledge are accompanied by only very small increases in correct usage. Correct usage is primarily a matter of establishing correct habits of speech, and grammatical knowledge is useful only in so far as it helps to establish such habits. Apparently imitation and repetition of correct expression are far more efficacious in forming correct habits than grammatical knowledge. The recent tendency to reduce the time devoted to formal grammar and to postpone the study of it to later years is in accord with these findings.

The argument often advanced for the study of foreign languages, and particularly for Latin, that they are a great aid in the use and comprehension of English is unfounded. Arguments of this kind are unnecessary. Why should we not study Latin on its own account as a language and as a guide to a literature of its own? Its aid, as well as that of any other foreign language, in facilitating the use of English is very small. Why not recognize this as a fact? If you wish to know English, study English, but not via Latin or some other language. If you wish to know Latin, study Latin for its own sake primarily, an end sufficiently worthy in itself. The aid of one language in the study of another is only incidental and unimportant, at least so far as present methods of teaching foreign languages go. The figures presented should not be interpreted as an argument against foreign languages or particularly against Latin, but rather against certain assumed disciplinary, transferred, or derived benefits.

Summary.—The scholastic records of students in the university entering with Latin are only to a slight and negligible extent better than those of students entering with German. Likewise, the scholastic records in modern languages, either beginning or advanced, or in English, of students entering with Latin are only to a very slight extent better than those of students entering with German. This slight difference is probably due to an inherent difference in the students rather than to a difference produced by these languages.

The English vocabulary of pupils who had studied Latin was 2.7 per cent larger than the vocabulary of those who had not studied Latin in the case of university students, and 4.5 per cent larger in the case of high-school pupils.

The study of foreign languages materially increases a student's knowledge of English grammar, but only slightly increases his ability to use English correctly.

EDUCATION AS MENTAL DISCIPLINE¹

I

When doubts are suggested as to the value of certain time-honored subjects included in the elementary and secondary curriculum, one is told that the subjects in question are valuable because they 'train the mind.' 'Training the mind' is therefore a phrase which expresses a definite educational theory—the theory, namely, that the most important function of the school is to discipline the mental faculties so that in after life they will be serviceable instruments ready for effective use. The faculties to be thus trained are memory, reason, imagination, observation. People who believe in 'training the mind,' or in 'formal discipline,' which is the same thing technically expressed, almost invariably hold that the time-honored subjects—Latin, algebra, geometry, and so on—best serve this purpose. They believe that subjects which will themselves probably never be used furnish the most effective mental gymnastics to use an other favorite expression; that memory developed by learning Latin grammar, observation practiced in distinguishing moods and tenses, reason practiced in algebraic or geometrical operations, are so many weapons, in fighting trim, ready to be put to such uses as arise out in the world subsequently. The theory of mental discipline or formal discipline is therefore the bulwark of conventional or traditional education.

The opposing conception may be described as education on the basis of content. Education on the basis of content endeavors to equip the pupil with a varied body of properly-ordered material, which will serve his purposes, stimulate his interests, and engage his growing powers. It selects things to teach, not prima-

¹ Abraham Flexner, *Atlantic Monthly*, 119:452-64. April, 1917.

rily for the purpose of training the mind, but because the things are in themselves useful, satisfying, or inspiring—because, in a word, they serve some purpose which is valued either by society or by the individual, be the purpose material, utilitarian, artistic, spiritual, or what not. Education by content does not deny that there is such a thing as training. Indeed, having once chosen a particular subject or content, it insists that this content should be so presented as to develop the maximum power and interest. But it entirely disbelieves in the training of general faculties—a general memory faculty, a general reasoning faculty, a general faculty of observation—on which the theory of formal discipline sets such great store. It holds that really no such faculties exist, and hence that they cannot be trained. There are instead—so content-education believes—many kinds of memory, many kinds of reasoning power, many kinds of observing faculty; and all we know of training is that these various abilities are within limits improvable through exercise. Content-education holds, therefore, that, if the mind is to deal with varied, yet definite and specific experiences, problems, and activities, education or training should concern itself with such experiences, problems, and activities—not with totally different and very limited problems and activities. Hence the emphasis on a content which is in range and quality fairly representative of the world as a whole and of the mind in all its varied interests and capacities.¹

American education is, on the whole, dominated by the former of the two conceptions I have briefly characterized—that is, by the theory of formal discipline. Children study most of their present subjects, not because they serve essential purposes or represent significant experiences, but because they are supposed to 'train the mind.' From time to time in recent years, to be sure, content-studies have crept in or been forced in. But it would be a mistake to suppose that this indicates a deliberate abandonment of the disciplinary line. On the contrary, the new content-studies have largely shared the fate of the rest of the curriculum—they have been taught so as to 'train the mind.' Their presence does not therefore indicate that the content-theory is crowding out the theory of mental discipline.

¹ For an admirable discussion of this whole question, the reader is referred to Professor Ernest C. Moore's *What is Education?*

The frankest and most unqualified embodiment of the disciplinary conception of education is the preparatory school. I single it out in this discussion because, particularly in the East, it represents the kind of training given those who qualify for admission to college—those, that is, who want to get a higher education. It is true that increasing numbers enter college, in the East as in other sections, from public and private high schools which do not describe themselves as preparatory schools. Nevertheless high schools preparing students for college have been directly and indirectly compelled to approximate the preparatory school in the course of study and in the way in which the course of study is handled. Thus the influence of the American college works strongly in the direction of fastening on the secondary school the disciplinary conception of education. I propose in this paper to consider this procedure; in a subsequent one I shall try to convince college authorities that they ought to promote an experiment with the alternative conception.

The preparatory school devotes itself, then, to mental discipline. It seeks to train the mind by forcing it to do intellectual tasks mostly of little inherent interest, but of gradually increasing difficulty. Some pupils do, indeed, get interested; at times the personality of the teacher will irradiate the instruction; at times the study takes on the character of a game which minds of a certain type like to puzzle out. Again, it happens that in every class certain pupils do with ease and almost intuitively the tasks that are defended because of the deliberate intellectual effort that they are supposed to require and to train. I have never heard any believer in mental discipline explain what becomes of the theory in the case of such students—the students, I mean, who see through the thing in this rather effortless fashion. We need not, however, worry about them; for the number of those who succeed easily because of interest in the game or because of native capacity is not large enough to upset the contention that most pupils find intellectual tasks of the type employed difficult and unappealing. To consider what sort of training—intellectual and moral—these pupils get out of their hard and dull tasks, is the main purpose of this paper.

The preparatory school curriculum is made up of languages, abstract mathematics, history, and a bit of science. On its face, it is predominantly a thing of words and symbols. The mind that it trains is therefore necessarily the word-mind—

the mind that has to do with words, the mind that can be reached through words, and only in so far as it has to do with words or can be reached through words. If there be people—as there surely are—who think more or less in materials, in colors, in sounds, in images, in action, the word-discipline of the preparatory school is not for them, in so far as they think or act in those media. Now, of course, no education is going to dispense with words and symbols, and the best possible education is going to make a large use of them. But words and symbols are not used in the preparatory school discipline as they are used in daily life. In daily life words are used to suggest meanings or ideas. The preparatory school, on the contrary, uses words and symbols, not primarily to transmit a meaning, but, without emphasis upon meaning, as a method of disciplining the will, the reason, the power of analysis. The other type of school I mentioned—the content type—would employ words and symbols as keys to living subjects, as ways of summarizing experience, as stimuli and challenges to action. Not so the preparatory school. The preparatory school employs words and symbols as formal instruments for disciplinary exercise. And, as we shall see, it treats pretty much all subjects in pretty much the same fashion.

Let me make sure that I am understood when I say that the preparatory school curriculum or the college-entrance programme—call it which you please—is overwhelmingly a thing of words and symbols taught for formal ends. Note in the first place the prominence of language studies and the objects which the language studies subserve. Over one half the subjects offered are languages; much more than one half the time of pupils in school and out of school goes to the study of languages—to the study of languages, furthermore, which pupils do not learn and are not expected to learn. I say the languages are not learned; no one expects them to be learned. They are taught, not for the sake of their meanings, not to be used in suggesting ideas, but as a means of discipline.

Now consider what happens when a child studies, without learning, Latin and Greek. He commits to memory paradigms, conjugations, and vocabulary. What is the process? A mechanical remembering and identifying of arbitrary correspondents between mere words. Each particular ending in Latin equals something, or one of several somethings, in English;

each word in Latin equals something, or one of several somethings, in English. There is a list of cases with meaningless names to be arbitrarily accepted; it is astonishing how glibly children learn to employ this incomprehensible terminology. It is no part of the child's business to ask why; it is, in the main, his business to take the thing on faith and to commit it to memory. Thus, a whole series of declensions is memorized: in the first declension, a long *ā* is a symbol to be mechanically identified with what is called ablative singular, *drum* a symbol to be mechanically identified with genitive plural, and so on. Subsequently things called moods, voices, gerunds are accepted on the combined assurance of the printed page and of a teacher who treats this printed page with convincing gravity. Intelligence—on the child's part—is rarely involved; there is rarely anything for him to understand; there is rarely any stimulus to his wit or interest. It is, I repeat, a mechanical process which some children do readily and some do not—and there is an end of the matter.

An enormous mass of such arbitrary material has to be taken aboard like so much lifeless freight—declensions, conjugations, regular, irregular, with no end of equally arbitrary exceptions. Nor does arbitrariness end when the grammar forms are learned; for the syntax is from the pupil's point of view, generally speaking, just as arbitrary, just as much a matter of faith. He is told that *ut* means 'that,'—'in order that,' or 'so that'; that when it means 'in order that' the negative is *ne*; when it means 'so that,' the negative is *non*; once more, a mechanical set of correspondences, to be mechanically memorized and mechanically applied. So far as he is concerned, it might as well be the other way round or any old way round. No reaction which he can feel or perceive would follow the reversal. Where alternatives are open, the pupil usually fumbles or guesses; some hapless children have a diabolical tendency to guess wrong—just as Mrs. Wiggs's children were carried irresistibly into an open rain-barrel, when with the slightest good fortune they might have avoided it. In such instances the teacher's displeasure, evinced by a low mark, not some untoward experience with the rain-barrel, is the pupil's only way of knowing right from wrong.

I do not, of course, mean to deny that now and then Latin and Greek can be made, and indeed are made, to convey a dis-

inction in meaning which the child may be brought to see is genuine—as, for example when the preposition *in* and *ad* are distinguished. But even if such opportunities were much more abundant than they are, they would not give to classical study the disciplinary virtue asserted for it. The content learned and the method by which it is learned go together; the child cannot acquire a method *in vacuo* with power to apply it afterwards to other situations that may arise. The child who learns to make a verbal distinction learns just that—and that is practically an end of the matter; he is not acquiring a generally applicable analytical skill. If the teacher happens to possess a wider interest in his classics and if in consequence his teaching is more or less vitalized thereby, the pupils profit by just so much. The subject is made just so much more real; its stimulating, engaging, or, if you prefer, disciplinary effect is increased by so much, and no more. The disciplinary theory, however, tends strongly to restrict the teacher's opportunity to develop his subject on these side lines. In any case, the scope of meaning or reality in operating with dead languages is as a pinpoint compared with vast arid stretches of formality or arbitrariness. For the most part, teacher and pupil operate, or, better, attempt to operate analytically on intellectual lines with empty, unreal symbols devoid of the breath of life.

II

One half the subjects of a curriculum based on the old-fashioned college-entrance requirements can thus be criticized for many pupils as mere juggling with words and symbols—a juggling which does not in the end hope or intend to be familiar enough with them to become unconscious of mechanism and conscious of the ideas which languages are meant to communicate. Nor is this failure to learn the language as a language regarded by the preparatory school as a fair criticism; for learning the language is not what the school aims at—so far, at least, as the avowed theory of the preparatory school goes. The school aims at mental discipline—and the reader is now in a position to judge how much and what kind of discipline most pupils get from the preparatory school language studies. Moreover, whatever they get, there is no reason whatever to suppose that as discipline it goes beyond the particular abilities called into action

by it. In this respect, the discipline got from learning Latin resembles the discipline got from playing chess. *You train what you train.*

Mathematics is another formal subject, taught, mainly, not for the sake of imparting knowledge that is or can be used to serve some purpose or other, but taught, once more, because it is supposed to discipline a certain faculty—primarily the reason. In practice, if only teachers observed what happens, it might be perceived that algebra is learned, not as a rule by the exercise of anything that can be properly called reason, but passively, mechanically, just as Latin grammar and Latin syntax are for the most part learned. And just as the Latin student is reputed to be successful if he can reproduce what he has taken in, so the algebra student succeeds when he can mechanically perform the operations that the teacher or the book performs. He is told that $a^2 \times a^2 = a^4$, while $2a \times 3a = 6a^2$; and, more or less precariously, he comes to do the same thing himself. When negative or fractional exponents are reached, he is—as they say—‘drilled’ until hazily and doubtfully he can carry out the same operation. A bit later, and in the same imitative fashion, he learns to apply the binomial theorem or to solve quadratics involving two unknown quantities in this way or that, according as they resemble this type or that. But throughout he is dealing with words and symbols through which he does not penetrate to the realities represented.

Nor is the study illuminated by being brought to bear. Formal discipline does not require that; as I pointed out in discussing Latin, the tendency is in the opposite direction. The disciplinary purpose narrows and impoverishes. Hence the preparatory school curriculum offers nothing in the way of science or industry which might relieve the teaching of mathematics of its uncompromisingly abstract character, or might tend to mitigate formality by means of an occasional touch of reality. In consequence, save in rare instances, the student goes through a mechanical exercise to which he remains spiritually indifferent—an exercise which does not tap his interest or power, and which for that reason leaves him very much the person that it found him. Highly typical is the girl who made 83 per cent in algebra in the latest college-entrance examinations, after being “prepared” in one of the most successful preparatory schools in the East. Just before entering the examination, she ran through with

her father all the common quadratic types, glibly explaining the appropriate solution of each. It was a perfect performance—mechanically considered; but when it was finished and the subject dismissed, she suddenly broke out, 'Oh, by the way, father, what is a quadratic anyway?' Which reminds me of a keen little fellow who recently explained to his mother: 'You are not expected to understand algebra—only to do it.' Algebra then, like Latin and Greek, means the mechanical handling of symbols, in close imitation of set models. As a discipline it would at most train children to operate imitatively with formulæ whose origin and function they do not appreciate.

The theory of formal discipline is so pervasive that it has subdued other subjects which, it might be supposed, have and can have only content-value. How, for example, does the preparatory school teach history? In the first instance, the history selected is usually Greek and Roman, not modern—a choice which sacrifices at once the powerful motivation of the student's environment. Ancient history has, to be sure, its proper place in education, but ordinary schools have thought little as to what that place is. The choice of Greek and Roman history is, therefore, not a choice dictated by a sense of the value of content; still less is the treatment calculated to bring out content-value. The subject is presented just as formally as can be. The unit or symbol is larger, a paragraph, instead of a case or tense or formula; but words and symbols still. There is a textbook of Roman history in which things are boiled down to the form in which the pupil must absorb them with a view to their subsequent reproduction. Of the realities which these feeble paragraphs vainly attempt to portray, few obtain any grasp whatsoever. For the time being, a capable fellow can tell you the main features of the laws of Solon or the Licinian rogations. But the subject-matter was not chosen because of intrinsic interest and importance; and the teacher aims, not at cultivation of historic or civic interest, but at a neat and presentable formal achievement. One may well be puzzled as to what faculty is trained by this kind of exercise; a recent authority tells us that it is 'memory, imagination, and social reasoning!'

I mentioned science. In the last school-year, or the last but one, boys and girls whose faculties have for some eight to ten years been disciplined on case-endings, moods, rules of

syntax, algebraic formulæ, Euclidian demonstrations, Roman constitutions, and the like, are permitted to get a year of a chosen science—physics, or chemistry, or physiology. Well, tardily, to be sure,—but let us not be ungrateful,—the eager boy, itching by this time for a contact with real problems, his curiosity deadened, but not yet wholly dead,—here at last, he will have done with words and symbols; he will come face to face with content, with phenomena. Not so, however. Preparatory school science, like preparatory school language, preparatory school mathematics, preparatory school history, is intellectual in aspect, meagre in content, disciplinary in purpose. The child's normal scientific interest and activity are derived from the world of phenomena and objects in which he lives. In reference to that world, he is, as has been said, 'an animated interrogation point': he wants knowledge of that world; he strives to understand it and to do something with it. The content-teaching of science would heed these strong instincts; and discipline, if we may use the term, would come because of the reality and variety of the efforts made.

This would be science taught from the standpoint of content. The preparatory school, interested in discipline, selects a single science,—physics or chemistry,—presented in strictly logical or intellectual fashion, in a systematic, even if elementary, form; and thereupon, the pupil studies bookishly described phenomena, experiments, and laws, with the same strong emphasis on memory, mechanism, and faith that is characteristic of his study of Latin and algebra. He gets in his physics and chemistry as little sense of the real phenomenal world as he gets sense of meanings when he studies Latin, or sense of uses when he studies algebra or geometry. And what faculties are disciplined? Why, the faculties of 'observation and concrete reasoning'!

Thus, our children study science, our children study history, just as they study German and French and Latin—not to gain insight or mastery or understanding, not because the subject-matter is a selected portion of their present or prospective experience in one way or another is going to make a difference to them, but for the purpose of disciplining faculties that do not exist, by means of exercises, the real disciplinary outcome of which remains uninvestigated. They do not study languages as a way of getting at and conveying ideas. They do not study history as a way of arousing and satisfying social

curiosity. They do not study science because they wonder at the world about them, or want to be able, so far as may be, to understand or control it. School science, is, therefore, as Dr. Wickliffe Rose once remarked, apt to be 'Latin under another name.'

III

I am at a loss to say just what the preparatory school English course—or the college-entrance English requirements, which is the same thing—aims to accomplish. It may, perhaps, be fairly regarded as an attempted discipline in taste and expression. As such, it is, of all the features that constitute the preparatory school programme, the most dismal failure. For the futility of conventional English teaching, in respect to both taste and expression, is precisely the point that strikes any observer, who, not being responsible for the teaching, is compelled to deal subsequently with the pupils who have passed through it. A university law school professor recently deplored, in conversation with me, the meagre vocabulary, feeble style, and paucity of ideas characteristic of the 'picked' students to whom his first professional courses were addressed. How could it be otherwise? The art of expression develops where there is something to say; but the preparatory school curriculum, and, most of all, the English course, disdains any content such as would give the pupil something to say, and, instead, devotes itself, as consistently as it can, to a 'discipline,' which bleaches out all subjects to a uniform deadly pallor. As for taste—taste is something to be developed, not something to be summarily forced upon the pupil. Why should the long-drawn-out analysis of dull, unsympathetic, and ill-adapted 'classics' like *Comus*, develop an ordinary pupil's taste? and why should a man or woman who teaches English for twenty years be compelled every year to dawdle for days over *L'Allegro*, *Il Penseroso*, and Burke's speech? In the thing itself there surely resides no sovereign virtue whatsoever—only infinite boredom for pupil and teacher alike.

In fact, however, the English course—like the Latin course and the history course and the mathematics course and the science course—was devised by persons who never took into consideration such factors as boy-nature, girl-nature, what is

left of teacher-nature, or the realities of life and the universe; and it is carried out implicitly by teachers who do not compare what actually happens with what the theory of mental discipline assumes is happening. For, just as soon as the product is tested,—tested as to knowledge of the subjects studied, or tested as to the power thereby developed,—at that moment the whole structure will collapse like the house of cards that it is.

Mental discipline thus effaces the natural distinctions between different subjects; it makes Latin, history, mathematics, science, and English as nearly as possible the same. It empties the subjects of content in order the more effectively to utilize them for intellectual discipline. I repeat what I have already said: this discipline trains what it trains,—not general faculties, but specialized abilities,—the degree of specialization depending on the relative breadth of narrowness of the presentation; on the extent, that is, to which discipline forgets itself and for the time being becomes content. Dr. Rose very aptly compares the champions of mental discipline to the Egyptian priests who planted rows of dead sticks which, for disciplinary purposes, they watered regularly; had they planted corn, they would have got the same discipline, and something more: the corn, for example, and everything directly and indirectly involved therein.

The champions of mental discipline do not usually try to prove their case by testing the faculties supposed to have been trained. From time to time a business man avers that his classical training lay at the bottom of his commercial success; and some engineers are credibly reported to have expressed the same sentiment. But retrospection is, to say the least, unreliable. I do not forget, of course, the examinations—the preparatory school examinations and the college-entrance examinations. But these examinations do not test the faculties which mental discipline claims to have trained; they are not tests of memory-power, reasoning-power, observation-power, imagination. They test only whether the candidate remembers the things by means of which the faculties in question are said to have been trained. If a boy is required to learn

amnis, axis, callis, crinis,
cassis, caulis, fascis, finis,
funis, fustis, ignis, ensis,—
orbis, panis, piscis, mensis,

in order to train his memory, you do not prove his memory to have been trained by requiring him to repeat the lines (especially if, as is usually the case, he has forgotten most of them). Nor do you prove that a long succession of geometrical propositions has trained his reasoning power, because he can reproduce the simpler ones, after hard drilling on them. You merely prove that a person who has done a thing often enough can sometimes do the same thing again—more particularly, if he has been warned in advance as to just when he may be called on to do it. Meanwhile, certain types of memory and reasoning power and observation might really be tested; but, to prove the preparatory school contention, these powers would have to be tried on material that is both fresh and varied. This is not done.

A much more limited test might however have its uses—namely, a test of the power of pupils in the very subjects with which they have been working. The school tests and the college-entrance tests are not sufficiently objective; besides, the results have not been studied in a way to throw light on the fundamental questions involved. Latin is taught—we are told—so as to train the mind. Very well; let us find out in the first place, how well it is taught. A certain state superintendent of education has recently asked every fourth-year high-school Latin pupil in his state to tell in writing the meaning of a piece of simple Latin prose. On the basis of the performance he makes a preliminary estimate of the efficiency of Latin teaching in his state as between 10 and 15 per cent. This result and other results not a whit more encouraging ought to suggest to believers in mental discipline a series of problems. If Latin is taught to train the mind, how successfully must it be taught in order to train the mind? Is any kind of result better than none at all? Is an inferior result—failure in greater or less degree—capable of *harming* the mind or character? What does an efficiency of 15 per cent signify? Does it guarantee training, or may it indicate damage? If it should be decided that 15 per cent efficiency is not helpfully disciplinary, then just where shall the line be drawn? Suppose we tentatively assume that an efficiency of 60 or 75 per cent indicates a trained mind, can an efficiency of 15 per cent, objectively measured, be raised to an efficiency of 60 or 75 per cent, similarly measured, and if so, how? Is success in this possible? If possible, what would it cost in time, effort, and money? Would it be worth what it cost to all, or

only to those who can achieve it with a moderate expenditure? If a low final grade indicates damage, what shall be done for those who cannot be brought above it? Obviously the same questions can and should be raised as to the other subjects in the disciplinary curriculum. And when the disciplinarians begin to study education in a scientific spirit, they will entertain such questions and patiently seek the answers to them.

Before leaving the subject, I must touch on one other point. Mental discipline is sometimes, as I have said, called a 'gymnastic,' and it is held to be justified by the bodily analogy. I do not want to be entangled in a discussion based on metaphors; the metaphors are too apt to come between the disputants and their subject. But so much I may say: the physical gymnasium may or may not train the muscles for other uses; at any rate, it makes only a limited demand daily on the time and energy of the boy; it leaves him free to cultivate other forms of physical expression and urges the wholesomeness of so doing. Not so the mental disciplinarians. Their procedure—meagre and one-sided though it be—tends, by mere pressure, if not otherwise, to exclude other forms of mental and spiritual activity. At a time when pupils are being formally disciplined and mentally trained by means of six subjects all presented in the same fashion, one might suppose that teachers, supposed to be students and observers of the adolescent mind and soul, would be aware of other potential interests and capacities that must be given a chance. Not at all. Children with a turn for the woods, for animals, for poetry, for music, for modeling, for drawing, or with the possibility of such a turn, have no right to be heard as against the sure intellectual and moral salvation promised by a mental discipline, which has never been subjected by its votaries to a critical examination! If the grind destroys or starves out their possibilities—well, their 'faculties' have been trained!

IV

When I say that American schools generally are committed to the theory of formal discipline, I do not mean that other claims are not from time to time also advanced. Latin and Greek are occasionally defended on the ground of their culture-value. The champions of formal discipline appear not to realize

that the culture argument flatly contradicts the disciplinary theory, and really accepts the content view of education. In any event, the methods pursued and the results obtained belie the culture argument. Latin and Greek have culture-value only for those who learn the languages and read the literatures. But so few of those who study Latin and Greek learn them, read their literatures, or take any interest in their literatures, that the culture claim cannot be taken seriously as a ground for general and enforced study of Latin or Greek. If, of course, any one desires to learn Latin or Greek as he would undertake to learn French or German, and for the same kind of reason, no objection could be urged, for such study would be calculated to realize culture-value—which is a real and not a formal end. But an argument for the classics based on the assumption that they are to be mastered and appreciated cannot possibly serve as an argument for a study that does not result in mastery or appreciation, and is not expected to result in either. It is a tactical blunder for believers in classical culture to make common cause with the mental disciplinarians, for classical culture can thus only be involved in the ruin which has overtaken mental discipline.

Precisely the same must be said of any argument for Latin or Greek on the ground that higher education must transmit the inheritance of the race. The transmission of culture in the shape of literature, art, history, philosophy—this is content-education, not disciplinary education. Transmission can be effected either through the original language, or through translation, or through both. But if through the original, then the language must be learned, just as French is learned, as a medium for the communication of ideas. The disciplinary purpose is once more a contradiction. Persons who really believe in the culture argument or the transmission argument cannot too soon extricate themselves from their present educational company; they belong on the content side. Instead of defending education of the disciplinary type, they ought to be raising the question as to how in this busy modern world the content of ancient culture can be conserved and transmitted. Whatever the way, it will not be through schools organized and conducted on the theory of mental discipline.

The situation in respect to the theory of formal discipline is, indeed, a curious one. It dominates American education generally;

it receives in the preparatory school 'a clean-cut, unqualified embodiment. Our educational administrators thus accept it, believe in it, practice it. Meanwhile, among students of the science and art of education,—that is, among those who are concerned with the study of educational processes and results,—the theory of formal discipline has, nowadays, no standing whatever. It is as though the students of disease believe, let us say, in the germ theory, while the practitioners of medicine took no stock in it at all. As a matter of fact, practitioners of medicine listen to the students of disease; but educational administrators are still wary of psychologists and such folk!

For our present purpose, I need not argue the case against formal discipline further. It is clear that its psychology is seriously at fault; for the faculties—memory, reason, etc.—which formal discipline thinks to train in such wise that they can afterwards be used to deal with any problem or emergency that arises, simply do not exist in separate form. Memory, reason, imagination are not single entities which can be disciplined once for all. There are all sorts of ways of remembering, reasoning, and imagining; so that, from the standpoint of training, not a monotonous, verbal, and intellectual set of exercises is needed, but rather all kinds of physical and intellectual experience. Further, formal discipline errs in belittling the possibilities of interest, in ignoring the urgency of knowledge and power adapted to practical needs, social and personal, and, finally, in overlooking the significance and importance of individual capacity. It is at once false in its psychology and too narrow in its outlook.

V

A school that concerned itself with content would begin by asking what children naturally do and are capable of doing; what tasks life imposes; what accomplishments are of inherent value; what different sorts of ability can be profitably and happily employed. It would set out to guide and to develop the interests and abilities of children; it would select from the objective world significant objects—languages, literature, art, civics, industry, physical phenomena—in the hope of making them objects of genuine and significant concern to growing boys and girls. It would not bother with discipline in the abstract; but

it would endeavor so to do its work that habits and attitudes of the right kind would tend to become the ways in which the individual expressed himself. In a content school such as I am describing one would study languages in order to understand them, to use them, to have access to the ideas stored up in them, to satisfy one's curiosity, if one will, about their history, structure, and so forth. But always one's aim would be involved in the language, not in some supposed medication of one's mental faculties through it. Again, one would study science, not to discipline the mind, but to serve a purpose through knowing the subject; the same would be true of history and literature. Science, literature, history, modern languages, industrial processes, would be taught because they answer the questions which live people ask and can be led to ask, or because they in their substance minister to our needs, capacities, or aspirations,—taught, that is, because they serve purposes and in order that they may serve purposes.

Some of the purposes will be what some people might, perhaps, call low; some of the purposes will be what they might be pleased to call high. We can afford, however, to be less concerned with the topography of the purposes than with the reality or genuineness of the results. If literature can be taught so that there is a vital connection between school and home reading; if history can be taught so that it supplies the child with answers to his problems and raises more problems still; if languages can be taught so that they can be used; if science can be taught so that the world about us is either intelligible or intelligently unintelligible; if industry can be so utilized that the child can understand and sympathize, it is immaterial by what adjective either the effort or the result is described. Is it not clear that this way of studying restores to every subject its proper individuality and thereby engages the mind in various ways? There could indeed be no greater absurdity than to divorce training from content, even were it possible; all the advantage lies the other way. In other words, the purpose for which subjects are taught lies, not in the pupil's mind, but in the subject-matter and its relations to existence and life; and the more varied and appealing and trying, if you will, the subject-matter, the better for the boy, whether the result be viewed from the standpoint of discipline so-called, or from the standpoint of knowledge, interest, and power. The purposes

inherent in subject-matter and its world-relations are infinite in variety. Some are utilitarian; some spiritual. Some are mediate—that is, lead elsewhere; some end with their own attainment. But they are always and invariably real, not formal; and discipline comes—if it comes at all—through exercise and experience with various realities.

At heart, intelligent teachers of the classics must know this just as well as we do; they must in their candid moments admit to themselves that they hold on to the theory of mental discipline because their present subjects are not successfully taught as content. They defend Latin and Greek as instruments of mental discipline; but they know perfectly well that that is not why Latin and Greek came into education. Latin and Greek came into education as real subjects, not as formal subjects; they came into education because they embodied more valuable thoughts than other languages, and because except through learning Latin and Greek the thoughts were not accessible. Suppose even to-day someone invented a way to teach Latin,—a way to teach it so that preparatory school pupils could speak it, read it, care for its literature,—would not the preparatory schools jump at it and never mention mental discipline again? Do they not really know that there is more good of one kind or another to be got out of knowing a language than out of the discipline acquired through failure to learn it?

Consider the question from another angle. I know a family of children whose father reads, writes, and speaks Latin. It is to him a language in the same sense and for the same purpose as English and French. His children are acquiring Latin as they are acquiring English and French. There is no question of grammar or syntax, of formal or of informal discipline. They are absorbing Latin through their pores. Is this a bad thing or a good thing? Are those children acquiring a language at the expense of a discipline? Are they getting culture by sacrificing mental training, and, perhaps, moral training, too? Are we to say that, if Latin could be learned as children grow up, because it is spoken in the household, the loss to intellectual training would be utterly disastrous? Of course, no one believes this. Everybody knows that the value of Latin is in knowing Latin, as the value of French is in knowing French, and the value of botany is in knowing botany, and in using it to solve problems and serve purposes; and that thorough and varied

knowledge in this sense is effective as training because it involves wide, varied, stimulating, and resourceful employment of one's capacities. If, then, Latin is to remain in the curriculum, it remains in order to be learned; and if it goes out, it goes out because it is not learned, or because other languages or other subjects are better worth while.

In conclusion, a word by way of quieting the apprehensions of those who fear that real studies will weaken character through appealing solely to spontaneous interest and through following slavishly its vicissitudes. I observe here once more indications that the disciplinarians have not exerted themselves to understand the opposing theory, and have not carefully reflected upon their own practice. When, for example, they discover a teacher of Greek who interests his pupils and arouses their enthusiasm, they do not discharge him. They do not tell him to make the work disciplinary by making it dull; they raise his salary. If interest—whether native or derived—is salutary in respect to Greek, why is it dangerous in connection with a modern subject or activity? Now let me say that in my judgment every teacher, every parent, every business man, every person responsible for any kind of result, will do well to enlist the most vigorous possible interest on the part of those with whom he is trying to work. That only means that the workers are active, assertive, that their powers are mobilized—the very attitude that a good teacher or effective leader aims to procure.

I do sincerely hope that every teacher in a modern school will have enough common sense to do this. The preparatory schools themselves do it when they can, and are right in so doing. Interest, whether native or derived, is indeed the most direct, though not the only, path to moral, intellectual, and economic salvation. So far from being a source of possible demoralization, it is the most certain means of preventing just that.

Perhaps it may be said in reply that it is not so much interest that is to be dreaded, as the heeding of variable and inconstant interests. But this is a manufactured bogey. The modernist does not propose to follow up every interest: he proposes to select and to develop significant interests. Nor does he propose to heed only the child's native interests and to drop activities as soon as interest flags. Subjects and activities will be selected because they serve purposes. Many of them will

be interesting, if teachers are fairly competent—the more, the better. But they will be taught because they serve purposes, not because they tickle the palate, and they will be taught thoroughly enough to serve their purposes, whether they cease or continue to interest. Difficult things will be done—some with zest, let us hope, others by hard pulling against the stream. In both cases—as in all cases—the effort will lead somewhere, and it will be supported by the consciousness that it does lead somewhere. Meanwhile, such effort involves no surrender of the principle that interest, derived as well as native, forms a legitimate and powerful motive. I should work it to the limit; I feel sure that far more can be done with it than is commonly done; but it is, after all, only one aspect of a complicated problem, and no well-informed person has ever made it the sole criterion of educational value.

THE TEACHING OF ENGLISH¹

English is probably both the least-taught and the worst-taught subject in the whole educational field. It is bad in the grade schools, worse in the high schools, worst in the college, while the university reaps the full benefit of the evil *crescendo*. The "English" of the modern curriculum varies from a silly combination of "Mother Goose" and the jargon of science or the shibboleths of religion to a disingenuous synthesis of antique philology and emasculated literature. No wonder some of the men and women who speak and write their language well would extend to prose the judgment passed upon poetry: English untaught is taught best. A teacher of English is so often a spoiler of English. Sometimes the only advice to a young man (less often a young woman) contemplating a serious composition in his mother-tongue is that of *Punch* in the case of marriage: "Don't." How does it happen that a man like John Bright, who never had the advantages of a classical or a college education, spoke and wrote perfect English, while our well-trained men of science can often do neither?

In the present brief essay the writer, from his own experience and investigation, desires to discuss some of the causes of this state of affairs and to suggest some common-sense remedies.

A New Orientation. Before we can expect good English both

¹ Alexander F. Chamberlain, *Pedagogical Seminary*, 9:161-8. June, 1902.

teachers and pupils, together with the public interested in educational affairs, must orient themselves anew concerning the origin and development of their mother-tongue. The study of English seems about the last place to feel the full effect of the Darwinian revolution. With wonderful obstinacy it keeps its face toward the setting instead of the rising sun, toward the past rather than the future. It would be a decided advantage were every teacher compelled to take a course in modern Chinese instead of in ancient Greek, for then he would possess some useful knowledge about the form of human speech most akin, psychologically, to his own and not so much useless lumber concerning that one most remote from it. Herein lies the essence of the new orientation. Let us study English in its relation to the only tongues that can ever compete with it for the mastery of the world,—Russian, Chinese, Japanese. The recognition of the psychological kinship of English and Chinese in particular may be of more moment to the race than was the discovery of the linguistic unity of the Aryan of the Indus and of the Thames. The Greek, Latin, and Sanskrit aspects of English have been fearfully overdone. We must exorcise the ghost of Max Müller and hold out *tête-à-tête* with the living yellow man who clings to his speech and propagates his kind so well. We can be very sure he will still be numerous and interesting when the last English grammar has been written. A course in Chinese will reveal to the teacher in convincing fashion that his language is a vehicle of thought and not a museum of grammar, and that, in matters of speech, the brains of 400,000,000 Mongolians and 100,000,000 Anglo-Saxons have moved upon remarkably similar lines representing, psychologically, the high-water mark of human achievement. This is the best antidote for the classical nostrum,—to be taken *quant. suff.* The study of English must be keyed to the *future* not to the *past*.

A Broader Field of Comparison. Some of the poor character of English teaching is certainly due to limitation of the field of comparison. The individuality of the mother-tongue has been lost sight of and its special virtues underestimated by the long-continued over-valuation of the merely formal qualities of Greek and Latin. A like effect has been produced by what Lenz calls the "deification" of Sanskrit. Under the pernicious influence of the classicists, the so-called "modern languages" of

continental Europe have been simply pitied or despised, until the crying needs of commerce and world-politics forced them into the educational field. The neglect of the other living languages of mankind has been absolute,—the new facts gained from the investigation of Asiatic and American Indian families of speech have not yet come into the ken of the "expert" in English, who is woefully ignorant of the general principles of linguistic evolution and often the exponent of some artificial system of instruction in which the grammar, the dictionary and the text-book take the place of living thought and its genial expression. A good waking up of the teacher along this line is absolutely necessary. Some up-to-date discussion of the essentials of comparative philology should find a place in every normal school, and as much of it as can be readily understood be given to the pupils in every high school. Then we will not find a graduate of one of the best high schools in Massachusetts leaving its halls under the impression that English is a descendant of modern High German, or believing that *all* new words in the language *must* be derived from Greek or Latin. The calamitous effect of such ideas upon the use of English as a tool of thought is only too apparent.

No Language a Model for Another.—It is an idea born of methods of monks and pedants that the Latins and the Hellenes in laying the foundations of their own languages were intent upon improving the style of modern English. Every tongue is *sui generis* as a factor in human evolution. English in this respect is absolutely independent of Greek and Latin, whose contributions were in no way foreordained or predestined for the purpose of eking out the time of the grade-school and teaching young Americans how to read, write and speak their mother-tongue. For the ordinary boy and girl the inflections and conjugations of the classical languages are simply a mill-stone around the neck,—English has decreed that they be "cast as rubbish to the void," and our language should be taught as it is and not as if it were a Greek or Latin dialect. Its progress as a form of speech practically without inflection should be the important thing, not the minute dissection of the skins it has sloughed off, the organs it has reduced to innocuous desuetude. What makes English English outweighs the relics of its earlier days. Not the fossil grammar, but the living speech, is matter for education. One will write and speak his

language better when his attention is given to that toward which it is moving rather than that from which it has broken away. Some information about the bed-fellow in the next lodging-house is better than a plethora of detail about the one in the last.

Latin not the Basis of English.—Latin has no more shaped the English tongue than Rome has built the Saxon heart or made the Saxon arm. English grammar is soundly Anglo-Saxon run through the sieve of a mind that never had a Latin bent. The good red blood of the vocabulary is Saxon too. After 1,500 years of subjection to Latin influence English is still English. Soldier, churchman, *littérateur*, statesman, scientist, have in succession been the advocates of Latin, but in vain. It has always been Mrs. Partington engaged in the same old attempt to turn the tide with a broom. From the unfathomable depths of the Teutonic ocean has come the mighty rush of waters overwhelming the Latin shallows and treating them to a bath of good Saxon brine. All the Latin in modern English is thus pretty well pickled. Before it went into the brine, too, every bit of Latin had the Anglo-Saxon meat-inspector's mark put on it. And a good many carasses went to the soap-factory. The teacher of English needs to know that Latin has no skeleton-key by which to open the doors of English at will. To-day Latin can enter English speech only by the same door through which come Russian, Persian, American Indian, Chinese and Malay. It is quite useless for Latin to try to steal a march while the long line is waiting, for the heart and soul of English are very democratic, and, when competitors, Latin counts for no more than Choctaw. It is the English thought, not the Latin garb, that is master of the situation. The test is service to a living tongue of the twentieth century, not homage or shelter of the wandering manes of dead vocabularies, or unquiet ghosts of languages wearying of the linguistic Hades and seeking for some real live incarnation among the thoughts of man. Latin, like every other tongue, is clay in the hands of the English potter. And he has more than one wheel to shape it upon. Spelling, pronunciation, form, meaning, etc., all these turn beneath his skillful hand. Who would recognize in *jilt* the descendant of *Juliana*, or in *cab* the offspring of *caper* ("he goat")? Why if Latin be so indispensable to modern English, has it (or Greek) not furnished substitutes for words like these: *Boycott, tariff, gong, caucus, taboo, totem, tattoo*,

cannibal, Tammany, bazaar, boomerang, hammock, hurricane, curari, guano, shampoo, cabal, mammon, etc.? For the simple reason that the Roman and the Greek mind never saw or felt some of these things as we see and feel them, and our language is strong enough to pick and choose from the living, not borrow perforce from the dead tongues of earth. The classicists are shocked at the ease with which English *Sprachgefühl* discovers these words and at the difficulty they meet in getting their own book-made terms adopted. They forget that English has no grammar wherewith to shackle any word. No armor to protect it, no ornament to deck it out with save thought only. To English the Latin and Greek arsenal of gender, case, inflection, conjugation, etc., is a sort of Nuremberg torture-chamber representing the Dark Ages of language when pious and bigoted literary inquisitors sought to convert all words, all languages, into some sort of orthodox Latinity. But speech no less than faith, had its Luther. What a wail went up from the classicists, who claimed to be the guardians of "pure English," when the word *sociology* was coined and successfully floated. Their loud protests against hybridism in compound terms only emphasized the fact that neither of their boasted model-languages could alone furnish the needed expression, so English, scorning the grammarian's limitations, took part from each and the new word appeared to designate a new and important branch of the science of man. The heart of English is still English. Johnsonese is dead. Macaulayesque is moribund even in our high schools where it has so long found shelter. Paragraphing may occasionally galvanize the ghost and make it walk a little, but, save where the English manufactured by teachers of English and written by men of science whom they have taught still lags superfluous on the stage, the English born of Latin imitation is on the way to decent interment. The greatest English of any century was written by one who knew "small Latin and less Greek," and the best English of our day by some who knew still less of both. If the teacher wants to see how English English can be, let him look at this little poem by F. W. Bourdillon:

"The night has a thousand eyes,
And the day but one;
Yet the light of the bright world dies
With the dying sun.

"The mind has a thousand eyes,
And the heart but one;
Yet the light of a whole life dies
When love is done."

Not a single word of Latin or Greek origin does this poem contain, and yet it seems to be pretty good English. And if the teachers would read the English Bible more and the Sunday newspaper less they would discover plenty more good English in which the Latin and Greek words are few and far between. The teacher needs to recognize that while Latin and Greek may add to the dictionary words that are there only by the mistaken efforts of men of science, who bury in such ceremonials the knowledge they have so laboriously acquired, they are but the "painted show," the real drama of life goes on in English,—it is the Saxon heart of English that is given "life more abundantly." Latin and Greek are incidents or accidents, not necessities, of our mother-tongue.

Full Use should be Made of the Evolutionary Aspect of English. No language in the world illustrates so well the development of human speech in harmony with the evolution of a great individual civilization. It has more than a thousand years of documented history from King Alfred to Goldwin Smith, from Caedmon to Kipling, from the oldest Saxon to the newest American. Here we have the whole progress of a language from the inflectional wealth of the Old English to the half dozen or more endings to which this has shrunk in the speech of today. And the verb has gained like the noun. Modern English believes in the preposition and the small particle against the long ending and the Latin verb. On every hand it has sought correlation with the world of thought, not with the formalism of the school-men. Language and literature alike are evolving to this end. Touched by Celt, Roman, Norman, and Frenchman, the spoken word and the written have progressed along paths peculiarly their own, and the giant figure of Shakespeare, no less than the speech of his people, is unique among men. With the Celt and the Saxon, English has sounded the depths of inter-racial conflict, with Englishman and Norman it has fought the battles of democracy and aristocracy, with the Tudors it has felt the emancipation of religion; later still it was with the evolution of the modern parliamentary

system, as before it was present at its birth; and in the wake, of New World discovery it has builded a Greater England over-sea, and circled the globe with its commerce, while multitudes in every continent and sea make it more and more the living language of mankind. All this the teacher of English should know, and as much of it as he can, he ought to teach. English as an object-lesson in human evolution is better than English shackled to the grammar and the dictionary.

The Democracy of English must be Recognized. Hitherto English has been taught as if it were an aristocracy for which youth (always so democratic) needed to be prepared. The core of a language is common to its men, women, and children,—children at play, women at work, men at their ordinary tasks, these are the makers and keepers of the speech that lives. Women, the guardians of the child, were the first shapers and transmitters of language. A few words sufficed the hunter, cunningly tracking the wild beast to his lair, or stealthily seeking the scalp of his foe. Woman, over the cradle, where life, not death, was inspiring her, caught innumerable sounds from the lips of infancy, and gave them place in the *mother-tongue*, which the laconic father was only too ready to accept. Of all things it ill becomes women-teachers to Latinize English; the Saxon heart of it is theirs by an inalienable birth-right. Since the very beginnings of our language the mother and her child have been together, and English is Saxon still. Take out of English but a single series of words (all woman's own by genial labor in the past),—*sow, sew, sweep, spin, weave, grind, wind, wash, bake*, etc.,—and what a void there is! And how many of the slang terms that ultimately find lodgment in the best dictionaries were coined by the child of the street! The teacher must cease to look upon English as something to be shaped and regulated for an aristocracy of men, and come to see that it is the tool of the democracy of men, women, and children, whose title to its use is far sounder than the decree of any pedagogic college of heraldry.

King Grammar must be Dethroned. By some strange accident the democracy of English is still subject to a king, whose tottering authority the great body of teachers, unable to break away from old traditions, chivalrously uphold. And this king is no Saxon monarch, but a tyrant of the books tracing his dynasty back to the days when the Latin school-men ruled

supreme. What is needed is a good, healthy declaration of independence and the relegation to the lumber-yard of the Latin grammars and their imitations. The teacher must see that English is to be taught as English, and not as if it were a Latin dialect. He must wake up to the real meaning of the fact that only by a supreme effort is Latin now used in the city of Rome itself, while a score of cities as important as the one by Tiber's side have sprung up in all parts of the world whose common speech is the once despised English. England once supplied oysters and slaves for the Roman emperors, now she has girdled the globe with a tongue, the record of whose thoughts and dreams requires a lexicon nearly fifty times as large as that which interprets all there is left of the prose and verse of her would-be Latin masters. It is to this larger democracy of the future, and not to the limited aristocracy of the past, that the teacher should swear allegiance. When, at the Council of Constance in 1414, the Emperor Sigismund was rebuked by the Cardinal Placentius for using a neuter noun as feminine he replied, "I am King of the Romans, and above grammar." And the way in which the various Romance languages have treated the neuter nouns they borrowed from Latin showed that they too were "above grammar," and indicates what they would have done further in this matter had not the school-men interfered. Four hundred years later a president of the United States (no less a man than Jefferson) went on record in these words "Where strictness of grammar does not weaken expression it should be attended to. But where, by small grammatical negligence the energy of an idea is condensed, or a word stands for a sentence, I hold grammatical rigor in contempt." But the users of English must be prepared to go farther than the Emperor and the President. And their poets point the way. Whitman in rude and Browning in more artistic fashion are the poets of democracy whose deliberate violations of grammar ask and need no excuse. The school-men may cavil and murmur as they please, but these prophets represent the future democracy foresworn of its allegiance to king grammar and speaking free men's thoughts as free men should. With such, the language shall come to its own, and thought, not form, be master of its destinies. The teacher should remember that while poets are akin to the gods, the grammarian is least among the sons of men. The poet thinks the thought of God after Him, the

grammarian shackles the thought of man with fetters he has made himself.

Poetry must not be Made into Prose. Poetry is the greatest possession of man. All language was once poetry, and most of it would be now if it were not for the petty dissections of the modern grammologue. In spite of the ancient philosopher who wanted to exclude them from his ideal republic the poets still live, and the little children love them as of old. Poetry is as eternal as childhood itself. It will never die out as long as generation after generation continues to produce fathers and mothers and the never-ending chain of children links past, present and future into one. President Eliot would teach all,—religion, morals, civics,—by poetry. Men of science like President Hall are of like opinion. So, too, students of nature, like Burroughs, who hold that poetry itself is sufficient without the brand of the teacher upon it. They are right. Give the children poetry fresh from the hands of genius and of God. Let there be no tampering with it. Hands off grammarian and re-toucher! Of all criminals the worst is the teacher who wants the child-like thoughts of genius transmuted into his own adult commonplaceness. Paraphrasing is a sin against the Holy Ghost. It has done more than any other single thing to kill the instinct for good English. Its very name should be anathema. We have barrels of sermons, bushels of orations, and books innumerable treating of the birth of American liberty, but who does not turn to the poet for the best word of all? And yet a teacher will set a pupil to paraphrasing this holy scripture, for such it is. Such action is utter sacrilege. A teacher who demands this is worse than any savage or barbarian. Emerson's immortal hymn ought at least to be freed from the Cossacks of the school. Over Shakespeare's grave we read:

"Good Friend, for Jesus sake forbear
To digg the dust encloased heare;
Bleste be the man who spares thes stones,
And curst be he that moves my bones."

This of the dead body of the poet. What words shall frame the blessing and the curse for those who have to do with the living body of the poet, the part of him that can never die?

The teacher of English ought above all to know good English

when he sees it, and to be wise enough to let it alone. It will sing itself into the hearts of the young without his organ of adulteration.

CLASSICAL LITERATURE THROUGH ENGLISH TRANSLATIONS¹

In the sixteenth century Melanchthon, the father of German humanistic schools, wrote an essay, not devoid of pathos, entitled *De miseriis pedagogorum*, in which among other things he bewails the *stupor pedagogicus* which descends upon the unhappy pupils through their "measureless labor and weariness in learning the Latin tongue." He laments the fate of the German as compared with the Greek who needed not to learn a strange tongue, but, as soon as he could read and write, went straightway to the study of science and philosophy. About a hundred years later, the bright chief of English humanists, Milton himself, complains that "we do amiss to spend seven or eight years in scraping together so much miserable Latin and Greek as might be learned otherwise easily and delightfully in one year." "Language," he further declares, "is but the instrument conveying to us things useful to be known."² He agreed then with Melanchthon's opinion, that "Latin and Greek are not culture, but only the gate thereto." Unfortunately, the "easy and delightful" method of learning Latin in one year has never been realized in practice, at least for ordinary mortals.

Since those days the status of culture has greatly changed: the vernacular tongues of Germany, England, and other European countries, which then were despised as incompetent and unfit for the embodying of any true literature or science, have risen to proud eminence in all branches of human thought. Particularly vital to our present theme is the fact that all the greatest classical works, for the sake of which the early humanists endured the "measureless toil of learning Latin," have been rendered by master-hands into the native and current languages of the civilized countries. Yet strange to say, the evils of which Melanchthon and Milton complain still exist; pupils in our schools still suffer from the ravages of the *stupor*.

¹ Edward O. Sisson. *School Review*. 14:660-3. November, 1906.

² *Tractate on Education*, p. 118. (Cassell, London, 1904.)

pedagogicus, and still "through long continued chase after words, lose the power to comprehend thoughts." As in Melanchthon's time, so in ours, the study of the Latin and Greek languages, which should be the doorway of admission to classic culture, too often proves instead a gate to bar out. This, we maintain, occurs in three ways. First and chiefest, vast quantities of time are devoured in the endeavor to master the languages, and thus the literatures are almost completely neglected. Secondly, the mastery of the language is, in all but a vanishing minority of cases, so far from perfect that the pupil gets little insight into the author's meaning, less into his style, and none into the true literary charm and beauty. Finally, the *stupor pedagogicus* becomes too often an *odium classicum*—a deep aversion to everything savoring of the languages which have formed such a long and tedious task.

As to the second and third of these indictments, I have little to say; they are old enough, and have been often and vigorously urged, and as vigorously opposed; I can only add a personal testimony which is the outcome of many years of teaching the two classical languages and observing the results of the teaching of others. As to the matter of time I wish to say a few words.

Let us take the case of a lad who studies Latin the usual time in a public secondary school, daily for four years; this makes, roughly, 150 weeks; we may fairly reckon one hour daily for work outside of the recitation. In the natural course of his Latin work he would "take," first, a year's lessons upon matter of no real literary value; then Caesar's *Gallic War* or material of somewhat similar quality and quantity; then from four to six books of the *Aeneid*, and six or seven *Orations* of Cicero. Upon these his 150 weeks have been expended.

What might he have done with translations? The following list is given merely as a suggestion of the sort of diet which he might enjoy, without the least idea that it is the best selection possible; let every classical scholar find abundant fault with the selection, and so add strength to my main contention.

Plutarch: ten selected <i>Lives</i>	8 weeks
Homer: <i>Odyssey</i> entire	8 "
<i>Iliad</i> entire	8 "
Xenophon: <i>Anabasis</i> and selections from the <i>Hellenica</i> and <i>Cyropedia</i>	10 "
Plato: <i>Apology</i> and <i>Crito</i>	5 "

SELECTED ARTICLES

Caesar: Gallic War, Civil War.....	10	weeks
Three or four Greek plays	6	"
Vergil: <i>Aeneid</i> entire; selections from <i>Georgics</i> and <i>Bucolics</i>	8	"
Hesiod: selections from <i>Works and Days</i> ..	5	"
Herodotus: selections	5	"
Cicero: select <i>Orations</i> and <i>Letters</i> , <i>De amicitia, De senectute</i>	10	"
Seneca: <i>Morals</i> (selections)	4	"
Tacitus: <i>Annals, Germanica</i> (selections) ..	5	"
Horace, Juvenal, Plautus (selections)....	10	"
Marcus Aurelius: selections	5	"
Epictetus: selections	3	"
Thucydides: selections	5	"
Aristotle: <i>Constitution of Athens</i> , and selec- tions	5	"
Pliny: selections	5	"
Minor poets and dramatists	5	"
Greek and Roman literary history, art, archi- tecture, mythology, religion, politics, private life, industry and commerce, social systems	20	"

The above plan allows amply for the student to read the works named in his hours of private study, and for the teacher to explain and discuss them in the recitation hour, and when necessary to quiz the class upon what they have read. Let it not be forgotten that the time which suffices for this noble survey of actual classical literature is merely the amount commonly given to Latin alone; for those who would take Greek also one-half of two-fifths as much more might be added to the above list, and the time given from the latter part of the secondary course, when the mind is matured and strengthened by the discipline of the earlier years.

By such a plan might the high-school student gain a real and living acquaintance with the master-works of the ancient world—the very thing for which Melanchthon and Milton labored; in weighing the question we must not forget that the great majority of high-school pupils never enter college; indeed, many of them do not complete the high-school course. When they devote themselves to the study of the Latin language, they simply sacrifice precious years to the acquisition of a tool for

a task which they never lay hand to; the tool, poor enough at best, quickly rusts away to nothingness. Moreover, of those who go to college after having spent four years on Latin in the high school, many do not elect Latin, but thank their stars that they are finally done with it; and, alas! some who do take it, upon compulsion perhaps, find other doors to the needed "credit" in Latin than their supposed mastery of the language for which they have paid so dear; in other words, those English renderings of the classics which might have been virtuous companions and entertainers, as well as sources of wisdom and culture, become the student's accomplices in an academic misdemeanor.

I have tried here merely to show reasons for believing that the use of translations of the classics would do far better service to classic culture than the present plan of dragging the pupil through the thorny wilderness of the language. I do not mean to imply the view that the above list, or any similar list from the Greek and Latin literatures, is the most valuable substitute for the years of language study; many other branches of possible high-school study must be listened to. I am not unaware that I am silent regarding what is by some held to be the most cogent argument for the study of Latin and Greek—discipline. This is one point upon which I am quite willing to think with the humanists of the Renaissance, and with the Greeks, who thought it waste labor to repeat childhood in learning a new tongue. There is much suggestion in the words of Plutarch upon his own experience in learning Latin: "It was not so much by the knowledge of words that I came to the understanding of things, as by my experience of things I was enabled to follow the meaning of words."

WHY I HAVE A BAD EDUCATION¹

Although prepared for college by a well-known classical school, a Bachelor of Arts in one university and a Doctor of Philosophy in another, my education is far from satisfactory. The reason is clear enough; a glance backwards reveals the cause in the stupid and irrational insistence upon the dead languages to which so many are subjected.

¹ Walter P. Hall. *Outlook.* 106:848-52. April 18, 1914.

By the time I, a trusting and docile boy, had reached the age of seventeen, it had been my lot to study the Latin language for five years and the Greek for four. Equipped forthwith with these great staples of the human mind divine, my reasoning powers strengthened and fortified by real mental pabulum, as my teachers told me, but in reality rendered dull and osseous, I was matriculated at college. To be sure, I was duly certified in the knowledge of certain other studies; of geometrical figures and algebraic formulas I must have known something, phantom-like ghosts of an uneasy past though they now appear. Also two years of German and a little English Literature had been meted out to me, together with a brief sketch of Ancient History, quite ancillary, as it were, to the work in the classics. The college entrance examinations in my case were twenty in number, and twelve of the twenty—if Greek and Roman history be included—dwelt exclusively with the classics. The other eight were divided between English, mathematics, and German. Nothing else was demanded. Of every branch of modern science I was as ignorant as an aboriginal Australian. If I knew anything at all of mediæval or modern civilization, it was purely fortuitous. Geography and American history were studied in grammar school, but in a primitive and amorphous fashion; the wealth of knowledge therein attained ranging from an enumeration of the capitals of Europe to a recital of the various battles of the Mexican War. Nowhere had there been a whisper of the workings of the American Government or of present-day social conditions in our country.

The *quid pro quo* which was mine in return for this lore of the ancients was meager in character. Certainly, as the result of the application of so many years, an appreciation if not a love for the recognized masterpieces of classical literature might at least be expected; yet of the former I have but little and of the latter none. Neither Virgil nor Horace is dear to me, and aside from these two poets five hundred pages contain all the classical Latin worthy of intensive study. Surely it is inexplicable that the precious time of the school-boy should be given over to the stupid military operations of Julius Caesar or to the rhetorical vanities of Cicero. Greek literature, at least original, is expressive and beautiful, and as a youngster I well enjoyed my Iliad; but I do not read it now, and it is doubtful if I

could. Herodotus and Thucydides are to be had in translation, and for Plato there is Jowett.

Never before have I made so complete a confession. Not only have I deceived others in this matter for years, but I have deluded myself as well. Some leisure day, I said, I will turn once more to the classics for their wealth of golden thought and philosophy staid and mellow. And the picture of this coming treat, a constant atonement for contemporaneous neglect, took its place among those beautiful foreshadowings of delights which the future is to bring. To enjoy the classics in moderation seemed the thing to do. It is always done in books, and is said to exist in real life. One wonders if it does. On scrutiny, my entire acquaintanceship fails to reveal an individual, not directly engaged in the teaching of the classics, whom I have ever known to read either Latin or Greek for pure pleasure. Many speak with feeling of the art superb of the writers of antiquity. Most of us have done so; but where are they who read them? A clergyman may, for conscience' sake, occasionally scan his Greek Testament, and other folk perhaps for motives similar pick up their dusty Virgils; but do any do so joyously? There may be such, but I know of none. Is it not, then, questionable to cram these distasteful doses down the protesting throats of our restive children? Yet we do so with gusto, and talk with wise unction of the value of the unpalatable. Two years' teaching experience in one of the better known of our minor colleges has brought me in close contact with a faculty of intelligence and culture, a faculty which nevertheless voted all but unanimously to restore to sophomore year the compulsory study of an ancient language. Did my friends on that faculty read Latin or Greek? They may have in the small hours of the night or behind closed doors; but if they did, I knew it not; and, what is more, I suspect that many knew as little of the classics as I, and some perhaps less. One even wonders whether they of Oxford and Cambridge are not equally self-deceptive in this matter; and though one speaks with diffidence on education in England, surely there is no evidence of any incontinent love for the ode Pindaric or the Latin Fathers among those graduates of her universities whom it has been my pleasure to meet.

The assumption is frequently made that from the classics

may be extracted the mental training *sans pareil*. Of this there exists not one iota of proof. The study of Latin affords as good mental discipline as the study of biology, history, or any other well-synthesized subject, but discipline neither better nor worse. There is no psychological evidence extant that differentiates between Latin and German in so far as mental processes are affected, yet it is stoutly affirmed that the plastic intelligence of youth has but to be touched by the magic wand of Latin, and, presto! he thinketh. Why should this miracle be so devoutly believed when no reason worthy the name is advanced for its substantiation? Nevertheless this mysterious and romantic operation is a recognized axiom of the creed pedagogical, and only yesterday a teacher of physics assured me that, inasmuch as Latin construction was harder than German, the study of the former language developed a keener analytic ability in him who would decipher its occult meaning. What an argument is this! In all conscience, if difficulty in analysis is the desired end of education, let us introduce into our class-rooms the mental gymnastics of Duns Scotus and the mediæval schoolmen. There is no exercise that involves more patient scrutiny and closer exegesis.

The benefits that a classical education confer may be compactly stated in one paragraph. First, they undoubtedly afford a good foundation for the Romance languages. This, however, is easily exaggerated; and, furthermore, the more profound the study of Latin, the less likely the pursuit of more than one Romance language, and, moreover, that one is all to frequently neglected. To study Latin seven years and French one, as was my own experience, is not particularly conducive to a knowledge of French. Second, the derivation of a majority of our English words may be traced to Latin or Greek, and it is unquestionable that by their study the meaning of, at any rate, the more unusual English words may be more readily appreciated. Here again there is danger of overstatement. If the classics are good, the dictionary is better. A man classically trained can define approximately the word "exiguous," but to become acquainted with its finer subtleties and literary use an appeal to Murray is still desirable.

Finally, in behalf of the classics the argument may in justice be made that not only do they introduce us to a great and flourishing civilization, but that also by their study the classical

allusions in English literature are made clear. This argument is readily answered. If the time spent in the study of Latin composition alone was given to the classics in translations, it would provide a more thorough basis for the recognition of mythological allusions, and a better appreciation of the civilization of the ancient world.

The weary hours spent in the pursuit of the dead languages are not so much to be regretted as the loss, perhaps irreparable, of more catholic and useful knowledge. From a large part of that glorious literary, historical, and philosophical Renaissance of the twentieth century, Latin and Greek have all but debarred me. To read Hauptmann, Maeterlinck, Eucken, and Anatole France, one needs more than a reading knowledge of French and German; one needs a feeling knowledge as well, an ability to think, aye, and to dream, in the two great languages of the Continent. I cannot do that, and perhaps may never do it, and well I know the futility of picking my way through a living tongue even as a child deciphers his first story books. What consolation is it to read the Pauline Epistles in the original Greek, or the little, unauthoritative pamphlet by Tacitus on the habits of the early Germans?

Hardly, indeed, could we find an assumption more absurd than to expect the undergraduate to familiarize himself with four foreign languages, two living and two dead. It may be done. The college may turn out a linguistic automaton, with mind blank to chemistry, history, economics, and psychology; but the result is too dreadful to contemplate. As it is, the scientific training of most of us poor bachelors of art is desultory and picayune. The only science that I was taught was a little biology and geology; but slender as is the knowledge, I cling to it with great affection. The broadening effect of even one science is incalculable. When I compare the glorious vistas that historic geology laid open before my very soul with Plato's story of the death of Socrates—and there is nothing finer in Greek literature—I stand unhesitatingly by the geology. A trilobite is preferable to a second aorist. He, at any rate, is animate. And to think that had it not been for the pornographic plays of Terence, some knowledge of astronomy or botany might have been mine!

The indictment of Latin or Greek does not culminate with the neglect of modern languages or of science. The implanting

of culture even in its narrowest and most intensive meaning, as defined in the ancient belief that "the glory of the classics is that they teach nothing useful," is sadly impaired by the stress laid upon the dead languages. I refer to the field of æsthetics. Nothing, probably, could ever have taught me to carry a tune, but there is no reason why certain rudiments of music should not have been given me. I have always had a curiosity to know what counterpoint is. Sculpture, one suspects, is confined generally to young ladies' seminaries. Architecture may perhaps receive one day's attention in a general history of western Europe. Painting does well to meet with equal emphasis, and landscape gardening certainly is unknown. Why should there be no general course in æsthetics? Why should our boys and girls be uninstructed in the art of Rodin, or less familiar with the Rheims cathedral than with the Parthenon? Is the mental discipline of the classics a sufficient answer?

A charge far graver is the inexcusable neglect of contemporaneous social knowledge and science which the classics foster. Are not the mind-widening influences of the opening of South America and the unlocking of Asia more significant to us than the adventures of Dido and Æneas? Can any problems be so important as those of our own generation? By every code of ethics, Christian or otherwise, man serves his fellow-man, and to do that he must understand with a sympathetic wisdom the circumstances of his daily life. To right existent wrong; to straighten up, clean out and make over, the crooked, muddled, and diseased plague-centers of society, one must know what they are, where they are, and how they came into being. Without such knowledge true leadership is impossible, and to demand leadership in an educated class without these qualifications is fatuous. The makers of a future America will know what is wrong and how to better it. If they do not come from the college they will come from elsewhere, and the college graduate will be relegated to the garret—a garret where the regalia of the Merovingian kings and even their influence will be entirely lacking. This article makes no pretense to postulate in full those categories of present-day information that should be the minimum equipment of the college graduate. It is, however, of prime importance for him to know the general conditions under which the work of the world is done; the hours and the remuneration of labor; the dangers of the various trades and

the methods of preventing them; the protection, or the lack of it, afforded to the child and the woman; the treatment by society of the criminal, the pauper, the tramp, the emigrant, and the idle man of property. An intimate understanding of our own country there must be, while the phenomenal advance made by western Europe within our own generation may not be overlooked. Whether we taste of the fruit of the tree of good and evil or not, we must be aware of its existence. There can be no escape from the Egypt of economic bondage and moral iniquity into the land of Canaan, the blest, without knowing Egypt. For a boy or a girl to graduate from college entirely unfamiliar with the tide of European democracy onsurging throughout the last thirty years is unpardonable. But for a boy or girl to graduate from college in total ignorance of the intolerable conditions under which some men and women earn their living in this country of ours, and of the disguised child slavery before our eyes, is a disgrace.

The plea for a classic basis of education is but the expression of a spirit among certain educators that is unfair and injurious to the sensitive intelligence over which they have unfortunate authority. Mr. H. G. Wells in his brilliant little essay "The Discovery of the Future" has distinguished between "the legal or submissive type of mind," with its sacrosanct veneration for "treaties, constitutions, legitimacies, and charters," and the "legislative, creative, organizing, or masterful type which is perpetually attacking and altering the established order of things"; the mind "that sees the world as one great workshop, and the present as no more than material for the future . . . for the thing that is yet destined to be." If this generalization is just, and I think that, taken broadly, none can dispute it, it is a piteous fact that the former type of mind should so generally prevail among the teachers of our youth. Assuredly it is an axiomatic truth that the index of human progress is found in the advance of one generation over another, in the development of finer men and women. It is in the future only that our hopes lie; why, then, deliberately blindfold young eyes to the coming years and, to the immediate present, the womb of the future, immerse their souls in the aspirations of the dead, and gloss over with the muddy varnish of worn-out "ideologies" the atrocities of modern life and the courageous nobility of those who combat them?

It is to be regretted that at the present there is something of a lull in the fight for educational reform. The hard-pressed conservative, driven out of his Greek,¹ has entrenched himself with his Latin in the snuggest of earthworks, while the radical, content with partial victory, has abated the attack. Eternal effort, however, there must be, for, by the laws of all things, failure to advance spells retrogression, and of late the apologists of the old order, emboldened by the preliminary lack of synthesis and discipline—an unfortunate accompaniment of the elective system—have displayed renewed activity. The distinguished scholar, Mr. Gilbert Murray, has recently told us how fond the British workman has become of Greek. A pamphlet supposedly representing an entire college class has been widely and semi-officially circulated within the last few years, advocating in all seriousness certain fallacious and mischievous aphorisms of Edmund Burke, the scholastic shoddiness of which reason and experience have long since laid bare. Furthermore, in our great preparatory schools, rapidly growing in size and social prestige, there has been a constant tendency to imitate those methods of English education which in modern Britain have borne such deleterious fruitage, and in this country ere long will cause it to be said that the value of a young American's training varies in inverse ratio to the fashionableness of his education.

The comment of the future historian on our educational system existent at the beginning of the twentieth century would be grim reading to us of the present. It is true that here and there the light of a happier day is breaking. Amherst College, has had the temerity to announce for the next academic year a course in social and economic institutions for freshmen. In the new Columbia School of Journalism throughout a four years' course no Latin or Greek is required or expected, and it is thought that the graduates will write good English. A glance at the historical laboratory of Columbia College will

¹ A contrary view, published since this article was written, by Dean West, of the Princeton Graduate College, appears in the "Educational Review" for March, 1914. Statistics are marshaled by Professor West to demonstrate the utility of Greek by proving that those students who have studied it average better in their general work than those who have not. Might it not be fair to question this assumption by offering two other explanations: one, that the boys who have studied Greek come from families in which an academic tradition and environment tend to produce a better type of scholarship; the other, that there is a constant tendency in the preparation schools to press upon the brighter students the desirability of a training in Greek?

show, almost any day, eager and enthusiastic students working overtime on the filing of contemporaneous European newspapers, demonstrating once and for all the falsity of the assertion current with certain educators that the study of the present is "spineless pap," without discipline or consistency. These "barber surgeons of the mind," who make no distinction, in their muddled intellectual processes, between labor as such and disciplined, rational effort, must be driven from their fastnesses, or else forced to realize that labor without reason or utility is degrading to all that is fine in the spirit of man. We no longer have the treadmill in our prisons; some day there will be nothing that resembles it in our schools. We have struck our camp and have begun the march; but the fight for a thorough-going reformation has but just begun. As the situation is at present, the study of our own day, vitally essential to good citizenship, is entirely omitted from most preparatory schools, and is little more than a junior or senior elective in those colleges that pay to it any attention; whereas the study of the remote past, the true logical elective, is, in our Eastern colleges, almost everywhere compulsory. Until this condition of affairs is substantially reversed the radical reformer will never stand content.

EXAMPLES OF DEAD LANGUAGE PROPAGANDA¹

*Shall We Return to Greek?*¹

Some few years ago, after centuries of the study of Greek, this language was dropped from the course in English schools. Since the close of the war, however, it was decided by the English ministry that this study which had done its work so efficiently in educating the orators, empire builders, statesmen and literary men of England, was too valuable to be dropped and if has accordingly been reinstated.

Thus it is that the field of education has been the scene of countless experiments. Particularly during the last twenty-five years, there has been a succession of new studies introduced into

¹ This and the following article appeared unsigned in the December 20, 1920, number of *West High* issued bi-weekly by the students of the West High School, Cleveland, Ohio.

the curricula of the high schools of our country. The position has constantly been taken that the public purse should be used to provide the means whereby those studies could be pursued which are supposed to be best fitted for educating the pupil to do some work which would enable him to make his living in the world.

With this thought in view equipments have been provided on such an elaborate scale that the cost of educating its youth has become an exceedingly expensive work for the state. Thus the educational work of the present is in strange contrast with the simplicity of the past when a far less number of studies was pursued.

Teachers and public education officials are constantly made aware of the great diversity of talents represented in the student body of our high schools. Here there is great danger of spoiling a first class professional man by making a second class mechanic and vice versa. Opportunity should be provided for all. Among all the various types presented in a select body of youths is that minority class which is destined to become influential members of society, to dominate the professions, to do much of its writing, speaking and thinking, and from its sanity of judgment and discriminating powers, is sure to become the safe leader in the political affairs of the state. The education of this class is of the very highest practical importance, if we do not wish our artisans and working people to become the prey of "rédu-leadership."

To this splendid minority class the study of Greek, with its matchless masterpieces, provides most admirable training. We must not neglect this type of young men and women in any wise course of study.

If we could constantly have two or three classes at West High which would be students of this language, its art, its beauty and refinement, we should find that nothing would do so much to foster earnest effort, to raise our standards, to aid in seeking for the things that are really worth while, and to give tone and elevation to our whole course.

Shall we not then lend our efforts to foster this enterprise among our other excellent activities and start our next semester with a splendid class in Greek that shall contain what such classes always have in the past the real "salt of the earth?"

Eruptions from Room 1

"To him that hath shall be given." Thus sayeth Mr. Blank. This fact was demonstrated to us in the auditorium Monday morning, December 13th. We have often heard from the afore mentioned teacher, that one can get "nowhere" (i. e. reach the gates of Heaven) if one does not study Latin.

Gertrude R. a member of the Senior Virgil class, gave an oration on the benefits of Latin and Evelyn B. recited a poem. Violet A. gave 123rd psalm in Latin. A dialogue entitled "Hescio Quid in Oculum Incidit" was glibly recited by Floyd H. and Harold B.

Richard N. stirred his audience a second time by delivering Anthony's funeral address over the bier of Caesar. The following girls, Laura W., Emilie D., Grace R., Vivienne R., Sarah M., Sarah R., and Isabelle B., sang a Latin song, "Three Boys At Play." Vivienne R. sang a Latin Lullaby.

The final number on the program was a one act play "The Exetus Helvetiorum" presented by the Freshmen Latin Class.

Classical Languages¹

The study of classical languages is not to be dispensed with if one wishes a complete education. We cannot hope to attain a high standard of scholarship if we are to be disconnected from the extraordinary benefit derived from the works of ancient writers. To be familiar with Greek and Latin is an admittance to the highest ranks of culture.

The fundamental qualities of modern literature are practically identical with those of Greek and Roman productions. Therefore is it not necessary to acquire a knowledge of ancient languages to become a proficient student of English?

Possibly you may call them "dead" languages; but do you realize that being able to translate them carries an intellectual advancement from generation to generation?

Probably it may add an hour or so to your accustomed time of mental occupation. However, the time consumed would be most advantageous, if you aspire to be anything other than an office clerk or manual laborer.

¹ From the *Blue and Gold*, published weekly by the students at the East High School, Cleveland, O. This was written by a second year student and appeared under his name on November 16, 1916.

BRIEF EXCERPTS

Latin and Greek do not teach us how to write our own language. *Cloudesley Brereton, Nineteenth Century* 83:821 *Ap.* '18.

The learning of a language has a value according to the use that we are to make of it. *Alexander Bain, Education as a Science*, p. 167.

The study of the classical languages forms a positive bar to real acquaintance with classical literature. *Prof. Edward O. Sisson, School Review* 15:508 *Sept.* '07.

Throughout his after-career a boy, in nine cases out of ten, applies his Latin and Greek to no practical purposes. *Herbert Spencer, Education: Intellectual, Moral, and Physical*, p. 7.

Studying to think in a dead language is shackling the mind, instead of liberating it, and must lead not to a free but to an arrested development. *Paul R. Shipman, Popular Science Monthly* 17:148, *June* 1880.

Multitudes in both of these professions (law and medicine) rise to eminence without either Latin or Greek, to say nothing at all of the whole college course. *Rev Dr. B. H. Nadal, Methodist Quarterly* 49:227, *April* 1867.

During the time expended on the classical course, a man of average ability could acquire a speaking and reading familiarity with certainly two of the Romance languages. *John J. Stevenson, School and Society* 10:164, *Aug. 9, 1910*.

The cultivation of the Latin and Greek languages is a great obstacle to the cultivation and perfection of the English language. *Dr. Benjamin Rush, Essays: Literary, Moral and Philosophical*, p. 25.

It is psychologically impossible to pass through the apprenticeship stage of learning foreign languages at the age when the vernacular is setting without crippling it. *Ransom A. Mackie, Education during Adolescence*, p. 99.

To many boys the path to literary appreciation cannot lie through Latin or even Greek, because the old language hangs like a veil between them and the thought within. *Arthur C. Benson, From a College Window* p. 163.

As to the matter of the discipline to be got out of Greek, we think that is largely nonsense. Discipline comes equally in hard study whether Greek or German or Chemistry. *The Independent (editorial)* 35:1009, Aug. 9, 1883.

The principal defect in the present system of our great schools is that they devote too large a portion of time to Latin and Greek. *R. L. Edgeworth, Essays on Professional Education. (London, 1812)* p. 49.

The boasted discipline of classical education for the attention and reasoning powers may be quite as well obtained from studies which touch more closely the practical life of the great mass of the population. *Nicholas Murray Butler, The Meaning of Education* p. 174.

I may avow as a result of my reading and observation in the matter of education, that I recognize but one mental acquisition as an essential part of the education of a lady or a gentleman,—namely, an accurate and refined use of the mother-tongue. *Charles W. Eliot, Popular Science Monthly* 17:145, June 1880.

For all those who mean to make science their serious occupation; or who intend to follow the profession of medicine; or who have to enter early upon the business of life; for all these, in my opinion, classical education is a mistake. *Thomas H. Huxley, Science and Education* p. 153.

We have no classical Latin that is suitable for boys. This is a strong objection to giving it a place in the lower schools. Almost all the Latin read in both school and college deals with

war and politics. Besides, it is too difficult for beginners. *Charles W. Super, Popular Science Monthly* 77:565, Dec. 1910.

The methods and content of Latin instruction in most American liberal colleges are destined soon to undergo radical changes if that instruction is to make in future valid claims to the attention of any considerable number of undergraduates. *Prof. Henry W. Litchfield, Classical Journal* 14:6, Oct. 1918.

Greek and Latin have little value on the information side, except in special studies, inasmuch as the information which they contain can be acquired much more easily and thoroughly through translations. *John F. Brown, The American High School*, p. 108.

Even in the most modern public schools the classical teachers are picking over the boys, and any boy who can possibly be saved from the Modern side and kept on the Classical is so kept. *H. G. Wells, in Lankester's Natural Science and the Classical System in Education*. p. 202.

Languages have no value in themselves; they exist solely for the purpose of communicating ideas and abbreviating our thought and action processes. If studied, they are valuable only in so far as they are practically mastered—not otherwise. *Abraham Flexner, A Modern School*. p. 13.

No one denies that the author of the Iliad had marvelous skill in description, but not a few have regretted that a writer of such ability had no better subject than the quarrels and combats of lustful savages, whose exploits, so vividly pictured, are those of mere brutes. *John J. Stevenson, Popular Science Monthly* 77:555 Dec. 1910.

Our colleges, theological schools and academies are yielding to our ministry a small per centum of thoroughly trained classical scholars, mingled with some quite well trained by their own private efforts, and a still larger number who, without Greek or Latin, are good plain preachers and laborious pastors. *Rev. Dr. B. H. Nadal, Methodist Quarterly* 49:229, April 1867.

But the obvious way to master our mother-tongue is to study *that*, and not the mother-tongue of somebody else—to study it in its own masterpieces, not excluding indeed its adopted ones, whether from the Greek or Latin or any other original, but studying these in its own idioms, forms, and words, not in theirs. *Paul R. Shipman, Popular Science Monthly* 17:149, June 1880.

Shall we be told, as usual, that the best way to learn English is to study Latin and Greek? The answer is, that the facts do not corroborate this improbable hypothesis. American youth in large numbers study Latin and Greek, but do not thereby learn English. *Charles W. Eliot, Century Magazine* 28:206, June 1884.

As compared with science, Latin is not only cheap, but an easy subject to teach. In few branches does a little knowledge go so far with a teacher, and in few can it be used in such an imposing way to drill and break in boys on a small capital of knowledge on the teacher's part. *G. Stanley Hall, School Review* 9:657 Dec. 1901.

While more secondary pupils in this country take Latin than any other topics, save algebra alone, more drop it soon and forget it more completely than is the case with any other topic. More boys drop Latin and also drop out of high school from this than is the case with any other subject. *G. Stanley Hall, New England Magazine* n.s. 37:170, Oct. 1907.

The result, at all events, is that the majority of boys in our schools never get the idea that they are in the presence of literature at all. They are kept kicking their heels in the dark and cold antechamber of parsing and grammar, and never get a glimpse of the bright garden within. *A. C. Benson, The House of Quiet.*

When the Government takes over things the fur flies. But who would ever have expected to live to see all the American Colleges and Universities opening this week with the classics abandoned, the secret societies abolished, athletics reduced to recreation and the students made to study. It all seems too sensible to be true. *Independent (editorial)* 96:41, Oct. 12, 1918.

The first three centuries of the Christian era had before their eyes the light of the classics and the wisdom of the ancients; but they went steadily from bad to worse. The last three centuries have had modern literature and the useful sciences and arts, and have gone steadily from good to better. *Dr. Jacob Bigelow, Modern Inquiries*, p. 46.

To make the classics easy is no part of our duty. Only flabby-minded pupils wish for easy subjects, and these are not worthy of our attention. For them one might recommend a three year course in bookkeeping and stenography as being possibly within the range of their mental powers. *Editorial, Classical Journal*, 13: 147. Dec. 1917.

Among the efforts to stimulate interest in the classics in high schools, especially in the middle and far west, may be enumerated classical clubs, Roman banquets, Latin games, plays in the original Greek and Latin (though oftener in translation) dramatizations of Vergil, Caesar, Horace, etc. *Classical Weekly* 5:1 Oct. 7, 1911.

A dead language is the Dead Sea of thought, if it may not be more aptly likened to the Sea of Tranquillity in the moon. We think in our mother-tongue only, through which only, therefore, our self-activity is determined, and by which only, for that reason, we cultivate our minds. Our mother-tongue is the sole medium of our mental development. *Paul R. Shipman, Popular Science Monthly*, 17:148 June 1880.

One of the main reasons for poor English in high school, is because of the excessive time given to other languages just at the psychological period of greatest linguistic plasticity and capacity of growth. Dr. G. Stanley Hall aptly says, "Very grave is the danger that the idiomatic use of the mother tongue will be destroyed by 'translation English.' *Ransom A. Mackie, Education During Adolescence* p. 99.

It has been said that six months of the language of Schiller and Goethe will now open to the student more high enjoyment than six years' study of the languages of Greece and Rome. It is certain that six months' study of French will now

open to the student more of Europe than six years study of that which was once the European tongue. *Goldwin Smith, Lectures on History*.

I hold very strongly by two convictions,—The first is, that neither the discipline nor the subject matter of classical education is of such direct value to the student of physical science as to justify the expenditure of valuable time upon either; and the second is, that for the purpose of attaining real culture, an exclusively scientific education is at least as effectual as an exclusively literary education. *Thomas H. Huxley, Science and Education*, p. 141.

To my mind the only justification of any kind of discipline, training, or drill is attainment of the appropriate end of that discipline. It is a waste for society, and an outrage upon the individual, to make a boy spend the years when he is most teachable in a discipline the end of which he can never reach, when he might have spent them in a different discipline, which would have been rewarded by achievement. *Charles W. Eliot, Educational Reform* p. 117.

As soon as public opinion began to consider it the function of the State to carry the child through the additional years of secondary schooling, not as a privilege for the individual, but as a State duty, then the obsoleteness of Latin as a school subject became apparent. Whatever its cultural value for the individual, the current educational criticism considers Latin as distinctly unnecessary in a people's school, and a relatively strong group of critics would reject it entirely. *U. S. Commissioner of Education, Annual Report for 1912*, p. 9.

Wealth or property is the complement of classical training, and the young man surfeited with the latter and minus the former is at a serious disadvantage when pitted against the young man with both, as witness the abject failures of hundreds of young men who leave our colleges and universities, their heads crammed with Latin and Greek, their pockets empty. If unfitted temporally for teaching, they are apt to be quite as badly equipped for earning a living as when they entered college. *Lapp, John A. and Mote, Carl H. Learning to Earn.* p. 349-50.

There are too many histories, too many new sciences with applications of great importance, and too many new literatures of high merit which have a variety of modern uses, to permit anyone, not bound to the classics by affectionate associations and educational tradition, to believe that Latin can maintain the place it has held for centuries in the youthful training of educated men, a place which it acquired when it was the common speech of scholars and has held for centuries without any such good reason. *Charles W. Eliot. Latin and the A. B. Degree.* p. 15.

The study of Latin cannot tell us what the English language is—it can help us to understand how it has come to be what it is. In order to learn to speak English with accuracy and precision, we have but one rule to follow,—to pay strict attention to usage. The authority of usage, the usage of cultivated persons, is in all disputed points paramount. . . . In the case of words that we have derived from the Latin, the meaning of the Latin term has often been so modified that it would be the merest pedantry to pay attention to it. *Henry Sidgwick, Miscellaneous Essays and Addresses*, p. 283.

Fifty years ago the standards of the best colleges, such as Harvard and Yale, were no better than the high school of today. Then the curriculum was filled with rubbish which the instructors characterized as "mental exercises," such as theoretical problems and language conjugations. Now education has taken a trend toward the practical. Shorthand replaces "amo, amas, amat." We have learned successful co-ordination of mind and body, and the mental exercises have been discarded. *President Arthur Holmes, of Drake University, Des Moines Register*, Feb. 13, 1920.

The average classical graduate, as far as the writer's very extensive experience tells him, uses no better English than the average graduate in science. Indeed it would be easy to make an imposing list of authors to prove that classical training is unnecessary; few writers in England and America have excelled G. W. Curtis, Lawrence Hutton, W. D. Howells, T. B. Aldrich, R. W. Gilder, J. G. Holland, R. H. Stoddard, H. T. Tuckerman, G. P. Lathrop, and William Winter, yet, if the published biographies be true, these were not college men and some of them had only limited opportunity in secondary schools. *John J. Stevenson, School and Society* 10:164, April 9, 1919.

If a man cannot get literary culture of the highest kind out of his Bible, and Chaucer, and Shakespeare, and Milton, and Hobbes, and Bishop Berkeley, to mention only a few of our illustrious writers—I say, if he cannot get it out of those writers, he cannot get it out of anything; and I would assuredly devote a large portion of the time of every English child to the careful study of the models of English writing of such varied and wonderful kind as we possess, and, what is still more important and still more neglected, the habit of using that language with precision, with force, and with art. *Thomas H. Huxley, Science and Education*, p. 185.

Notwithstanding our emphasis on classical subjects, we have little to show for our pains in this particular. We have produced a very few men of world eminence in art or literature. Although our scientists have produced epochal inventions and have made some revolutionary discoveries, almost invariably they owe little of their genius or inspiration to our school system. Our curriculum does not foster scientific research in the industrial world, and our development in this particular is due largely to our great natural resources. This development, in spite of the curriculum, has furnished the invitation to science and invention. The school system has done little. *Lapp, John A. and Mote, Carl H. Learning to Earn*. p. 353.

The modern world unquestionably owes much to Greece and Rome but much less than many would have us believe. The shackles forged by the Greek and Roman intellect crippled development after the revival of learning and centuries passed before men succeeded in casting them off. One must concede unhesitatingly the brilliancy of many ancient writers, but that is not to say that they excelled or even equalled those of modern times. Modern thinkers excel those of the classic world, because the horizon is farther away; just as civilized man with many concepts excels the Greenlander or Hottentot with his few concepts. And it may be said in passing that Greek civilization was not self-originated. It was but the full blossoming of Egypt and Babylonia, a blossoming which ignored the trunk and roots whence it was derived. *John J. Stevenson, Popular Science Monthly* 77:557, Dec. 1910.

Perfected by the Jesuits and imitated by the rest of the world, this classical training, which reigned until this century and has only slowly been displaced from its seat, is a most interesting devise of control over the middle and ruling classes. For a pyramidal society putting a severe strain on obedience, the safest and best education is one that wears away the energies of youth in mental gymnastics, directs the glance toward the past, cultivates the memory rather than the reason, gives polish rather than power, encourages acquiescence rather than inquiry, and teaches to versify rather than to think. It is natural that teachers in meeting such requirements should construct a system that favors the humanities rather than the sciences, literature and language rather than history, and the forms of literature rather than the substance. *Prof. Edward A. Ross, Social Control.* p 171-2.

The doctrine that a knowledge of Latin is indispensable to real acquaintance with the great literatures of the world is difficult—indeed impossible—to maintain before American boys and girls whose native language is that of Shakespeare and Milton, of Franklin and Lincoln, of Gibbon and Macaulay, of Scott, Burns, and Tennyson, and of Emerson and Lowell. English literature is incomparably richer, more various, and ampler in respect to both form and substance than the literature of either Greece or Rome. One of the most interesting and influential forms of English literature, namely, fiction as developed in the historical romance, the novel, and the short story, has no existence in Greek and Roman literature; and the types of both poetry and oratory in English are both more varied and more beautiful than those of Greece and Rome. *Charles W. Eliot. Latin and the A. B. Degree.* p. 14.

When Herbert Spencer seventy years ago said that science was the subject best worth knowing, the schoolmasters and university professors in England paid no attention to his words. The long years of comparative peace, and of active manufacturing and trading which the British Empire since that date enjoyed did something to give practical effect in British education to Spencer's dictum. The present war has demonstrated its truth to all thinking men in Europe and America. It now clearly appears that science is the knowledge best worth having, not only for its direct effects in promoting the material welfare of mankind, but

also for its power to strengthen the moral purposes of mankind, to apply its method of accurate observation and inductive reasoning to all inquiries and problems, and to make possible a secure civilization founded on justice, the sanctity of contracts, and good-will. *Charles W. Eliot. Latin and the A. B. Degree.* p. 10.

At the time of the revival of literature no man could, without great and painful labor, acquire an accurate and elegant knowledge of the ancient languages; and unfortunately those grammatical and philological studies, without which it were impossible to understand the great works of the Athenian and Roman genius, have a tendency to contract the views and deaden the sensibility of those who follow them with extreme assiduity. A powerful mind which has long been employed in such studies may be compared to the gigantic spirit in the Arabian tale, who was persuaded to contract himself to small dimensions in order to enter within the enchanted vessel, and when his prison had been closed upon him fancied himself unable to escape from the narrow boundaries to the measure of which he had reduced his stature. When the *means* have long been the objects of application, they are naturally substituted for the end. *Lord Macaulay, Essay on the Athenian Orators.*

If I am to understand by that term (literary education) the education that was current in the great majority of middle class schools, and upper schools too, in this country (England) when I was a boy, and which consisted absolutely and almost entirely in keeping boys for eight or ten years at learning the rules of Latin and Greek grammar, construing certain Latin and Greek authors, and possibly making verses, which, had they been English verses, would have been condemned as abominable doggerel,—if that is what you mean by liberal education, then I say it is scandalously insufficient and almost worthless. . . . It was not literature at all that was taught, but science in a very bad form. It is quite obvious that grammar is science and not literature. The analysis of a text by the help of the rules of grammar is just as much a scientific operation as the analysis of a chemical compound by the help of the rules of chemical analysis. *Thomas H. Huxley, Science and Education,* p. 180-1.

But if the classics were taught as they might be taught—if boys and girls were instructed in Greek and Latin, not

merely as languages, but as illustrations of philological science; if a vivid picture of life on the shores of the Mediterranean two thousand years ago were imprinted on the minds of scholars; if ancient history were taught, not as a weary series of feuds and fights, but traced to its causes in such men placed under such conditions; if, lastly, the study of the classical books were followed in such a manner as to impress boys with their beauties, and with the grand simplicity of their statement of the everlasting problems of human life, instead of with their verbal and grammatical peculiarities; I still think it as little proper that they should form the basis of a liberal education for our contemporaries, as I should think it fitting to make that sort of palaeontology with which I am familiar that back-bone of modern education. *Thomas H. Huxley, Science and Education*, p. 98.

Once the student cuts entirely loose from real objects, and spends his days among diacritical marks, irregular conjugations and distinctions without a difference, his orientation is lost. The average American boy quits the high school in disgust because he cannot interpret its work in work in terms of life,—he cannot see how its work is related to the world of things as they are. The languages, ancient and modern, have a high value to those who can master and use them, for every new language opens to a man a new world and the influence of a new civilization. Most high school students get very little from any of them, and the one intellectually most important, the Greek, is practically excluded from our secondary schools as being of least practical value. Without in the least underrating the value of Latin to "roman-minded" men, who make a manly use of it, there is no doubt that the average American high school boy gets less out of Latin than out of any other subject in the curriculum. We may regret this, but we must face it as a fact. *David Starr Jordon, Popular Science Monthly 73:30-1, July 1908.*

After the Reformation the English universities cease to be the organs of the general intellectual life, and shrank to be merely the educational preserves of the aristocracy and the church. Jews, Roman Catholics, dissenters, sceptics, and all forms of intellectual activity were carefully barred out from these almost extinguished lamps of learning. Their mathematical work was poor, a series of exercises in the mere patience-

games and formulae-writing of lower mathematics; science they despised and excluded, and their staple training was the study, without any archaeology or historical perspective, of the more rhetorical and "poetic" of the Latin and Greek classics. Such a training prepared men not so much to tackle and solve the problems of life, as to plaster them over with more or less apt quotations. It turned the mind away from living contemporary things; it showed the world reflected in a distorting mirror of bad historical analogies; all the fated convergencies of history were refracted into false parallels. *H. G. Wells, The Outline of History, Vol. II, p. 428.*

He (Benjamin Franklin) anticipated the revolt against the classics which has come in our own day and which has relegated Latin and Greek into the region of the dead. It is not inexpedient to say that his idea of studying only such languages as will be of utility to those who pursue them is the correct principle in this department of education. In conformity with his notion we have the modern elective course, which is the practical result of his challenge of the advantage and utility of compelling all persons who pursue higher education to pursue the same subject in the same way for different ends. . . . When he pleaded for the study of modern languages and the relegation of Latin and Greek to a secondary place, he was confronting and challenging the scholastic world. The first struggle between the old system and Franklin's ideas of the new education occurred in Philadelphia in the very institution which he had been instrumental in founding, and the story of that struggle was told by Franklin himself two years before his death. *Francis N. Thorpe, Report of the U.S. Commissioner of Education for 1902, Vol. 2, p. 117-18.*

Not only, however, for intellectual discipline is science the best; but also for moral discipline. The learning of languages tends, if anything, further to increase the already undue respect for authority. Such and such are the meanings of these words, says the teacher or the dictionary. So and so is the rule in this case, says the grammar. By the pupil these dicta are received as unquestionable. His constant attitude of mind is that of submission to dogmatic teaching. And a necessary result is a tendency to accept without inquiry whatever is established. Quite opposite is the attitude of mind generated by the cultivation of

science. By science, constant appeal is made to individual reason. Its truths are not accepted upon authority alone; but all are at liberty to test them—nay, in many cases, the pupil is required to think out his own conclusions. Every step in a scientific investigation is submitted to his judgment. He is not asked to admit it without seeing it to be true. And the trust in his own powers thus produced, is further increased by the constancy with which Nature justifies his conclusions when they are correctly drawn. From all of which there flows that independence which is a most valuable element in character. *Herbert Spencer. Education; Intellectual, Moral, and Physical.* p. 79-80.

'I think that a course of instruction in our own language and literature, and a course of instruction in natural science, ought to form recognised and substantive parts of our school system.' 'I think also that more stress ought to be laid on the study of French.' To make room for these additions, the obvious remedy is 'to exclude Greek from the curriculum, at least in its earlier stage.' 'It is supposed that there is a saving of time in beginning the study of Greek early. I am inclined to think that very much the reverse is the case, and that, if several languages have to be learnt, much time is gained by untying the faggot and breaking them separately. There are two classes for whom the present system of education is more or less natural,—the clergy, and persons with a literary bias and the prospect of sufficient leisure to indulge it amply. Boys with such prospects, and a previous training of the kind I advocate, would in the average feel, as they approached the last stage of their school life, an interest in Greek strong enough to make them take to it very rapidly.' 'The advantage that young children have over young men in catching a spoken language, has led some to infer that they have an equal superiority in learning to read a language that they do not hear spoken; an inference which, I think, is contrary to experience.' *Henry Sidgwick, in Bain "Education as a Science,"* p. 387.

The Greeks themselves were acquainted with no foreign tongue. Did they know nothing of their own? They declined to seek culture in "self-alienation," as they might have done, by studying to think in the idioms and to give their thoughts the forms and words of the Pelasgians, Egyptians, Phoenicians, or Persians, although some of them, it is true, when already

cultivated, picked up what they thought worth taking among the intellectual possessions of these people, as was sensible; but their own language was the exclusive instrument of their culture, as the study of it was their exclusive means of knowing it. The "special-culture study" of the Greeks was their mother-tongue; and the method that sufficed for them—which trained Homer, Socrates, Plato, Thucydides, Demosthenes—will suffice for us. It has sufficed for us. Shakespeare, the greatest master of expression that the race has produced, knew no tongue but his own; and from the solar splendor of this supreme instance the argument, as no English scholar need be told, shades downward through one radiant name after another in the firmament of our literature. And the method is vindicated by not less significant products in other tongues, as witness, notably, the Icelandic "Njála," a biographical work at once of surpassing excellence in style and of purely native culture. *Paul R. Shipman, Popular Science Monthly* 17:151, June 1880.

And here we see most distinctly the vice of our educational system. It neglects the plant for the sake of the flower. In anxiety for elegance, it forgets substance. While it gives no knowledge conducive to self-preservation—while of knowledge that facilitates gaining a livelihood it gives but the rudiments, and leaves the greater part to be picked up any how in after life—while for the discharge of parental functions it makes not the slightest provision—and while for the duties of citizenship it prepares by imparting a mass of facts, most of which are irrelevant, and the rest without a key; it is diligent in teaching everything that adds to refinement, polish, éclat. . . . Supposing it is true that classical education conduces to elegance and correctness of style; it cannot be said that elegance and correctness of style are comparable in importance to a familiarity with the principles that should guide the rearing of children. Grant that taste may be greatly improved by reading all the poetry written in extinct languages; yet it is not to be inferred that such improvement of taste is equivalent in value to an acquaintance with the laws of health. Accomplishments, the fine arts, belles-lettres, and all those things which, as we say, constitute the efflorescence of civilization, should be wholly subordinate to that knowledge and discipline in which civilization rests. As they occupy the leisure part of life, so should they occupy the leisure part of education. *Herbert Spencer, Education: Intellectual, Moral, and Physical.* p. 61-3.

The world mainly owes its present advanced and civilized state to the influence of certain physical discoveries and inventions of comparatively recent date, among which are conspicuous the printing press, the mariner's compass, the steam engine, and the substitution of machinery for manual labor. The materials and agents for these and other like improvements have existed ever since the creation of the world, but the minds of qualified and competent thinkers, being absorbed in less profitable studies, had not been turned effectively upon them or upon their uses. There was electricity in the clouds, there were loadstones in the mountains, cataracts in rivers, and steam in household utensils, but the world rolled on; empires and dynasties and ages of barbarism passed away, and left the minds of men engaged in superstitious rites, in scholastic studies, and in fruitless or pernicious controversies. We owe the great debt of modern civilization to the enterprising, acute, patient, and far seeing innovators who, during the last few centuries, have broken away from the prescribed and beaten track of their predecessors, and have given their energies to developing, directing, and utilizing the illimitable forces of the material world. If these very men had given up their time to the objectless controversies of the schools, or to the more easy and agreeable studies of Latin and Greek, ignoring the great and vital problems of physical science, the dark ages would have still prevailed in Europe, and America might have remained an undiscovered wilderness. *Dr. Jacob Bigelow, Remarks on Classical and Utilitarian Studies* p. 31-2.

Neither Latin or Greek would be contained in the curriculum of the Modern school—not, of course, because their literatures are less wonderful than they are reputed to be, but because their present position in the curriculum rests upon tradition and assumption. A positive case can be made out for neither. The literary argument fails, because stumbling and blundering through a few patches of Latin classics do not establish a contact with Latin literature. Nor does present-day teaching result in a practical mastery of Latin useful for other purposes. Mature students who studied Latin through the high school, and perhaps to some extent in college, find it difficult or impossible to understand a Latin document encountered in, say, a course in history. If practical mastery is desired, more Latin can be learned in enormously less time by postponing the study until the student needs the language or wants it. At that stage he

can learn more Latin in a few months than he would have succeeded in acquiring through four or five years of reluctant effort in youth. Finally, the disciplinary argument fails, because mental discipline is not a real purpose; moreover, it would in any event constitute an argument against rather than for the study of Latin. I have quoted figures to show how egregiously we fail to teach Latin. These figures mean that instead of getting orderly training by solving difficulties in Latin translation or composition, pupils guess, fumble, receive surreptitious assistance or accept on faith the injunctions of teacher and grammar. The only discipline that most students could get from their classical studies is a discipline in doing things as they should not be done. I should perhaps deal with yet another argument—viz. that Latin aids in securing a vigorous or graceful use of the mother tongue. Like the arguments previously considered, this one is unsubstantiated opinion; no evidence has ever been presented in proof. *Abraham Flexner. A Modern School.* p. 18-19.

Contrary to the popular belief, the ability to speak several languages is not a mark of mental power. It merely indicates a retentive memory of a certain kind and a knack for imitating sounds. Sir Richard Burton relates in one of his books that once when near Jeddah he was accosted by a man in Turkish. Getting no response, he tried Persian; then the same silence made him try Arabic. When his listener still kept silent he grumbled out his astonishment in Hindustani. That also failing, he tried in succession Pushtu, Armenian, English, French and Italian. When Burton could no longer restrain his risibilities, he admitted his nationality and chatted for some time with the stranger in English, which he spoke very well. Professor Starr, says in his "The Truth about the Congo" that members of the Bantu tribes are often met with who speak several languages readily. A recent denominational periodical gives the names of several men who preach in four different languages and a larger number in three. One clergyman is named who uses Spanish, French, Mandarin, Chinese, Japanese, Italian and English. Of another it is said that he preaches in Burmese, German, English, Spanish, Latin, Greek, Hebrew, Danish, French and Quechua. When one visits an auction-room on the continent of Europe at a point where several languages are spoken and prospective buyers arrive from all parts of the world, he may hear the auctioneer drop one language and take up another until

all present have heard in their own tongue what the goods are and the bids. One also meets on the trains traveling salesmen who speak several languages with almost equal fluency. Cardinal Mezzofanti, who died in 1849, spoke fifty-eight languages and knew fairly well about fifty more. He was a man of very ordinary ability except that he had a singularly tenacious memory of an unusual kind, so that when he once heard a speech-sound he never forgot it. About twenty years ago there was an employee in one of the London offices who was able to receive and to send telegrams in twelve different languages. But he soon gave himself up to drink and became so unreliable that the company felt obliged to discharge him. *Charles W. Super, Popular Science Monthly* 77:566-7, Dec. 1910.

Allow for wastage, for bad health, and for bad teaching—and in this country (England) for the next thirty years it is plain common-sense to allow for bad teaching—you get for the most fortunate class in the community, between 5,000 and 8,000 hours of teaching altogether. Now what have you got to do in that precious five to eight thousand hours? You have to make an educated man, a man equal to modern demands. Let us consider what these demands are. Surely our elite must have two or three modern languages, not a large order so far as French and German go, but now there is this matter of Russia. This community of ours must get on terms of understanding with the great Russian community. It is a startlingly obvious political necessity. Unless a number of our better-class boys talk and understand Russian, our relations with the Russian people must be conducted very largely by political exiles and friendly Germans. Very well, if you do not like that you must have Russian in the curriculum. Then there is mathematics. In this mechanical age it is ridiculous that our ruling class should not have a good mathematical training. It is as necessary for the gentleman nowadays to understand a machine as it was in the old days for a knight to understand his horse. Next comes the history of mankind, the history of the universe—you want your boy of the better class at least to know his place in regard to the world, to mankind, to the past, in order to know his relation to the task in hand. Philosophy—you want social philosophy and a great deal of political philosophy, though for the great mass of our ruling class it does not enter into their education at all at present. There, let me point out, you have an explanation of the extraordinary

difficulty of which we are constantly hearing complaints, the failure not of the workman to understand the employer, but of the employer to understand the workman. Because there is no social political philosophy diffused through this country all our social and economic questions are dealt with in a petty spirit which seems to bring us always before we have got far with them, to a bitter personal class dispute. Lastly, this British Science Guild will not be pleased unless I include some experimental science for the sake of method also in this outline of a curriculum.

That is surely a good filling-up of the 5,000 to 8,000 hours of the boy's education. This is as much or more than we can hope to do. But let us look at the time-table of a reasonably clever boy of fourteen or fifteen at a public school. We find Latin, Latin, Latin, Greek, Greek, Greek. Because of the traditional ineptitude of the teacher—and it is a traditional subject—not one boy in ten who begins Latin will get to a mastery of that language, and in the case of Greek not one boy in a thousand. There, I think, we come to the real sickness in British education. This ineffective classical teaching sticks like a cancer in the time-table, blocking it up, compressing and distorting all other teaching. *H. G. Wells. in Lankester, Natural Science and the Classical System in Education.* p. 200-2.

It cannot be maintained that the classical system tends to the accomplishment of any of the aims which have been above enumerated as those which we may expect to attain by an education in which literary cultivation by means of English and the other modern languages accompanies a thorough and sincere teaching and training in the methods and results and history of natural science. It does not in any way cultivate literary taste or implant either a knowledge of or liking for literature. On the contrary, it creates in a large majority of its victims a disgust for not only Latin and Greek literature, but for all serious literary study. As Lord Rayleigh, the Chancellor of the University of Cambridge, told the meeting at Burlington House on May 3, 1916: "It is nothing less than an absurdity to talk about impressing the average school-boy with the language and literature of the ancients." He quoted his brother-in-law, the distinguished classical scholar, Henry Sidgwick, as saying that "the great impediment to a literary education is classics: you pretend to take a literary education by Greek and you end by getting none at all." When,

further, we come to that aim of education which we have spoken of here as "thinking truly," we find that the classical system does not make the smallest pretence of even attempting that result. There is no possibility of its introducing a youth to a perception of the bare facts of the world in which he lives, let alone give them an understanding of natural laws or a development of his own powers of observation, judgment, and capacity for discovering what is true and what is false. He is put through exercises in the memory and imitation of the phrases of more or less ignorant and deluded Roman and Greek writers. He is trained as the slave of authority and tradition. His outlook is backward rather than forward, and he is—so far as the classical system educates him at all—led to shrink from facing the great facts which actually concern his very life and his relations to its incidents, and to cover his ignorance and incapacity by quotation or invocation of extinct "masters" of whose writings his understanding is as small as is their importance at the present day.

When the worthlessness and consequently injurious character of the classical system in education are brought to public attention, it has become usual of late years on the part of those who seek to defend that system to make assertions attributing to it virtues and advantages which they are not able to prove, as a matter of fact, to belong to it. The chief of these is the assertion that the classical system gives "literary education." Lovers of literature and adepts in that art have been induced to rally to the support of the classical system by this plea. But the evidence before us clearly shows that the classical system is destructive of literary education and its worst enemy. A second plea is that the grammatical and other such exercises of the classical system form an unrivalled "mental gymnastic," and that on this ground we should approve of its monopoly of school education. The reply to this is that there are other equally good "mental gymnastics" available, and that in any case it is injurious to employ more than a very limited portion of the time and resources of school education in gymnastics, whether physical or mental. A third line which has of late years been taken in the attempt to defend the classical system is to call the study of the classics and of archaeology, history, geography and modern languages "humanistic." It is difficult to ascertain what its inventors really meant by this clumsy word, but if it is used in order to suggest a connection with the "humanism" of the Renaissance it is grossly misleading; if it is intended to imply that the studies so described

are "humanizing" and that others contrasted with them are brutalizing, it is offensive as well as untrue; lastly, if it is intended to assert that the studies classified as "humanistic" are especially "human" or "humane," as relating to man's thought and endeavor, we must protest that we cannot consent to exclude from the application of those terms any branch of human thought and endeavor. As a great thinker and writer, W. K. Clifford, has said, "There are no 'scientific' subjects. The subject of science is the human universe; that is to say, everything that is or has been or may be related to man." The claim that the classical system furnishes an education in "humanistic" studies cannot be admitted (even were we to accept that term), for the reason that the classical system fails altogether to give an education. *Sir Ray Lankester. Natural Science and the Classical System in Education.* p. 264-6.

It is twenty-seven years since the class of which I was a member graduated from this college. . . . How did Harvard College prepare me, and my ninety-two classmates of the year 1856, for our work in a life in which we have had these homely precepts brought close to us? The college fitted us for this active, bustling, hard-hitting, many-tongued world, caring nothing for authority and little for the past, but full of its living thoughts and living issues, in dealing with which there was no man who did not stand in pressing and constant need of every possible preparation as respects knowledge and exactitude and thoroughness—the poor old college prepared us to play our parts in this world by compelling us, directly and indirectly, to devote the best part of our school lives to acquiring a confessedly superficial knowledge of two dead languages. . . . Thirty years ago, as for three centuries before, Greek and Latin were the fundamentals. The grammatical study of two dead languages was the basis of all liberal education. . . .

In pursuing Greek and Latin we had ignored our mother tongue. We were no more competent to pass a really searching examination in English literature and English composition than in the languages and literature of Greece and Rome. . . . I was fortunately fond of reading and so learned English myself, and with some thoroughness. . . .

I do not hesitate to say that I have been incapacitated from properly developing my specialty (railway management) by the sins of omission and commission incident to my college training.

